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Catch, Effort and Biological Data of Fish, in Particular Lake Trout (*Salvelinus namaycush*), from Prelude and Prosperous Lakes, Northwest Territories, 1973 and 1979

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December 1990

Canadian Data Report of Fisheries and Aquatic Sciences No. 817

Fisheries and Oceans Pêches et Océans

Canada

91-01783/

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Canadian Data Report of

Fisheries and Aquatic Sciences 817

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CATCH, EFFORT AND BIOLOGICAL DATA OF FISH, IN PARTICULAR LAKE TROUT (Salvelinus namaycush), FROM PRELUDE AND PROSPEROUS LAKES, NORTHWEST TERRITORIES, 1973 AND 1979

by

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This is the 52nd Data Report

from the Central and Arctic Region, Winnipeg

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[1]Department of Fisheries and Oceans, Newfoundland Region
St. John's, Newfoundland A1C 5X1

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Cat. No. Fs 97-6/817E ISSN 0706-6465

Correct citation for this publication is:

Roberge, M.M., J.B. Dunn, and M.R. Falk. 1990. Catch, effort and biological data of fish, in particular lake trout (Salvelinus namaycush), from Prelude and Prosperous lakes, Northwest Territories, 1973 and 1979. Can. Dat. Rep. Fish. Aquat. Sci. 817: v + 52 p.

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ABSTRACT

Roberge, M.M., J.B. Dunn, and M.R. Falk. 1990. Catch, effort and biological data of fish, in particular lake trout (Salvelinus namaycush), from Prelude and Prosperous lakes, Northwest Territories, 1973 and 1979. Can. Data Rep. Fish. Aquat. Sci. 817: v + 52 p.

The fish populations in Prelude and Prosperous lakes, Northwest Territories were studied in 1973 and 1979 through a gill netting and biological sampling program. In addition, data were collected from an angler creel census survey. These data were used to examine the status of fish stocks with particular reference to lake trout. Biological data on tagged fish in 1979 are also provided.

Key words: angling; catch per unit effort; catch composition; experimental gill netting; lake whitefish, Coregonus clupeaformis; northern pike, Esox lucius; sport fishing; tagging.

RÉSUMÉ

Roberge, M.M., J.B. Dunn, and M.R. Falk. 1990. Catch, effort and biological data of fish, in particular lake trout (Salvelinus namaycush), from Prelude and Prosperous lakes, Northwest Territories, 1973 and 1979. Can. Data Rep. Fish. Aquat. Sci. 817: v + 52 p.

Les populations de poisoons des lacs Prelude et Prosperous, Territoires du Nord-Ouest, ont été étudiées en 1973 et 1979 dans le cadre d'un programme d'échantillonnage biologique et de pêche au filet maillant. De plus, des données ont été obtenues à partir d'une enquête sur le rendement de la pêche à la ligne. Ces données ont été utilisées pour déterminer la situation des stocks de poissons, surtout en ce qui a trait au touladi. On présente également des données biologiques sur les poissons marqués en 1979.

Mots-clés: pêche à la ligne; prises par unité d'effort; composition des prises; pêche expérimentale au filet maillant; grand corégone; Coregonus clupeaformis; grand brochet; Esox lucius; pêche sportive; étiquetage.

INTRODUCTION

Road access sport fisheries in the vicinity of Yellowknife, Northwest Territories are limited since road development in the area is not extensive (Falk 1979; Falk et al. 1980; Roberge and Gillman 1984). Existing road access sport fisheries in the vicinity of Yellowknife include the lakes along the Ingraham Trail; two such lakes are Prelude and Prosperous lakes. These lakes are typical of many of the oligotrophic lakes in the vicinity of Yellowknife and as such provide ideal habitat for lake trout (Salvelinus namaycush) (Falk 1979; Roberge and Gillman 1984).

Lake trout is one of the more important commercial and sport fish in Canada (Martin and Olver 1980) and is considered to be one of the most important sport fish species in the Northwest Territories (Falk et al. 1973). Both Prelude and Prosperous lakes receive moderate to heavy angling pressure from local residents and non-residents (Falk 1981). Cottage development is extensive on both lakes with 37 lots located around Prosperous Lake (Prosperous-Walsh Lakes Working Group 1979) and 103 lots around Prelude Lake (B. Wong, Department Fisheries and Oceans, Ottawa). In addition a 28 stall campground and a 15 guest-bed sport fishing lodge are situated at Prelude Lake. Commercial fishing occurred during the 1950's however no harvest records are available. In addition, subsistence fishing is known to occur on both lakes but again no harvest records are available.

In 1973 a survey was conducted by DFO on lakes along the Ingraham Trail including Prelude and Prosperous lakes. Data were collected on the biology and limnology of these lakes (Falk 1979). During the 1970's concerns were raised locally that both lakes were being over fished resulting in a decline in the availability of game fish. In 1979, in response to this concern, an investigation of the status of the lake trout in Prelude and Prosperous lakes was undertaken. This report presents the biological data collected during this study and an expansion of the biological data collected in 1973. Catch and effort data on the sport fishery occurring on both lakes in 1979 are also included.

STUDY AREA

Prosperous and Prelude lakes are situated on the Canadian Shield and are typical of many of the oligotrophic lakes in the vicinity of Yellowknife (Fig. 1) (Falk 1979; Roberge and Gillman 1984). Prelude Lake, located 30 km east of Yellowknife and north of the Ingraham Trail Highway (Fig. 2), has a surface area of 3 649 ha and a maximum depth of 53.3 m (mean = 18.0 m). Prosperous Lake, located along the Ingraham Trail Highway 15 km north of Yellowknife (Fig. 3), has a surface area of 3 719 ha and a maximum depth of 88 m (mean = 30.6 m).

Both lakes are thermally stratified in midsummer with surface temperatures approaching 20°C and a strong thermocline at approximately 10 m (Appendix 2 and 3). They both have an abundant supply of dissolved oxygen in the hypolimnion throughout the year and are relatively clear with secchi disc readings up to 7 m (Falk 1979). Other limnological characteristics of both lakes are presented in Falk (1979).

METHODS AND MATERIALS

CREEL CENSUS

In 1979, DFO personnel conducted a creel census survey on both Prelude and Prosperous lakes. Anglers were asked, by species, how many fish they: caught, released and kept, and the number of hours spent fishing. When possible the retained catch was sampled for length, weight, ageing structures (otolith or scale) and state of maturity. Additional creel census data acquired through a questionnaire survey in 1979 are available in Falk (1981) for Prelude Lake from June to August and for Prosperous Lake from June to September. Falk (1981) also provides a summary of the creel census data collected in 1973 from both lakes.

EXPERIMENTAL NETTING

Experimental gill netting was carried out at 12 locations on Prelude Lake from 17 June to 27 July 1979 (Fig. 2). Standard gangs composed of 25 or 50 m lengths each of 38, 64, 89, 114 and 139 mm mesh (stretched measure) nylon gill nets were used. Fifty-five locations on Prosperous Lake were surveyed from 13 June to 20 September, 1979 (Fig. 3). The gill net gangs were composed of varying combinations of mesh sizes and lengths.

Nets were set on the lake bottom at right angles to the shore at different depths. Sets were usually of 24 h duration and nets were set/lifted between 0900 and 1300 h (Appendix 1). Surface water temperature, water depths, secchi disc readings and weather observations were also recorded.

A description of the experimental netting conducted in 1973 is provided in Falk (1979).

Catches were recorded by site, mesh size and species. All fish were sampled for later biological analysis. Scientific names of all fish species caught followed Scott and Crossman (1975): lake trout, Salvelinus namaycush (Walbaum); northern pike, Esox lucius (Linnaeus); lake whitefish, Coregonus clupeaformis (Mitchill); Arctic grayling, Thymallus arcticus (Pallas); round whitefish, Prosopium cylindraceum; lake cisco, Coregonus

artedii (Lesueur); burbot, Lota lota (Linnaeus); white sucker, Catostomus commersoni (Lacépède); and longnose sucker Catostomus catostomus (Forster).

TAGGING

In Prelude Lake lake trout were captured for tagging using small mesh gill nets (38 mm and 64 mm stretched measure). Some active and unharmed lake trout caught in the experimental gill nets were also tagged. Lake trout and northern pike from Prosperous Lake caught in the various gill net gangs were tagged; in addition northern pike caught by angling were also tagged. During June and July tagging sites at both lakes were distributed throughout the lakes while during September tagging was only carried out in the Yellowknife River-Con Hydro area of Prosperous Lake (Fig. 3).

Fish to be tagged were removed from the nets or barbless hook, placed in a restraining trough, measured for fork length (±1 mm) and tagged. Only lake trout and northern pike considered in good condition were tagged with Floy (spaghetti) tags on the left side under the posterior portion of the dorsal fin such that the tag was anchored between pterygiophores. The tag, stamped with an identifying number and return address, was inserted using a Dennison model (Mark II) tagging gun. After tagging each fish was placed in the water and held until it recovered. All other fish caught were sampled for biological analysis.

BIOLOGICAL SAMPLING

Fish caught by experimental gill nets were sampled for fork length (±1 mm), round weight (±50 g), ageing structures (otolith/scale), sex and stage of maturity. Sex and the relative stage of maturity were determined by examination of the gonads and coded according to stages described in Roberge and Dunn (1988).

Sagittal otoliths were taken from lake trout and burbot. Scales were removed from lake whitefish, northern pike, lake cisco and longnose suckers as described by Hatfield et al. (1972). Age determinations were made as described in Roberge et al. (1986).

DATA ANALYSIS

A micro Vax II computer was used to manipulate the data. The Statistical Analysis System (1985) was used to generate length, weight, sex, age and maturity summaries and to preform basic calculations and statistical analysis. Weight/length relationships were determined using the following power equation:

$$\text{Log}_{10} W = a + b(\log_{10} L)$$

where: W = weight in grams

L = length in centimeters

a = Y-intercept

b = slope of the regression line

The standard deviation of the coefficient $b(S_b)$ was also calculated. Relative condition factor (K) was calculated using the following formula:

$$K = \frac{W \times 10^5}{L^3}$$

where: W = weight in grams

L = length in centimeters

Instantaneous total mortality rate (Z) represents the number of fish which would die in any small interval of time (Ricker 1975). Z was calculated from the least squares regression line fitted to the descending limb of catch curves. Catch curves were fitted by eye and only that portion of the curve that appeared linear was included in the analysis. Moderate fluctuations in recruitment in different year classes tend to create an irregular shaped catch curve. To reduce these irregularities, samples from successive years were combined (Ricker 1975). Ricker (1975) indicated that the modal age in the catch curve will commonly lie quite close to the first year in which recruitment can be considered effectively complete. Therefore, only the next older and subsequent age groups from the modal age were used.

Length and age frequencies were constructed to display catch composition. Student's T and Chi-square tests were used to determine significant differences in means and frequency distributions, respectively in age and length at the $P<0.05$ level.

RESULTS

PRELUDE LAKE

The 1979 catch per unit effort data for angled fish is presented in Table 1. The length and age data for lake trout angled in 1973 and 1979 are presented in Tables 2-3 and Tables 4-5, respectively.

Lake whitefish composed the majority of the fish caught in the experimental gill nets in 1973 and 1979 (Table 8). Lake trout composed 18.0% of the total catch.

There was no significant difference ($P>0.05$) in mean lengths for lake trout caught in 1973 (Table 9) and 1979 (Table 11). There was also no significant difference ($P>0.05$) in length

frequency distributions between 1973 and 1979 (Fig. 4).

There was no significant difference ($P>0.05$) in mean ages for lake trout caught in 1973 (Table 10) and 1979 (Table 12). However there was a significant difference ($P<0.05$) in the age frequency distributions between 1973 and 1979 (Fig. 4).

Length-weight relationships for fish caught by experimental gill nets are presented in Table 60.

Total instantaneous mortality rate was estimated to be 0.13 (ages=16-20) in 1973 but increased slightly in 1979 to 0.16 (ages=27-35).

PROSPEROUS LAKE

The 1979 catch per unit effort data for angled fish is presented in Table 27. The length and age data for lake trout angled in 1973 and 1979 are presented in Tables 28-29 and Tables 30-31, respectively.

Lake whitefish composed the majority of the fish caught in the experimental gill nets in 1973 and 1979 (Table 37). Lake trout composed 7.7% of the total catch.

There was no significant difference ($P>0.05$) in mean lengths for lake trout caught in 1973 (Table 38) and 1979 (Table 40). There was however a significant difference ($P<0.05$) in length frequency distributions between 1973 and 1979 (Fig. 5).

There was no significant difference ($P>0.05$) in mean ages for lake trout caught in 1973 (Table 39) and 1979 (Table 41). There also was no significant difference ($P>0.05$) in the age frequency distributions between 1973 and 1979 (Fig. 5).

Length-weight relationships for fish caught by experimental gill nets are presented in Table 60.

Total instantaneous mortality rate was estimated to be 0.19 (ages=11-16) in 1973 which was similar to that found in 1979 (0.16; ages=17-23).

ACKNOWLEDGMENTS

The authors thank the Department of Fisheries and Oceans, Yellowknife staff for their cooperation and support. Field staff were supervised by D.V. Gillman; assistance was provided by L. Dahlke, B. Mackenzie, W. Lazarowich, R. Feland, B. Mills, R. Remnant and R. Mulders. Special thanks go to Mr. W. Remnant for use of his cottage on Prosperous Lake and to Mr. C. Littler for his hospitality at the Con Hydro power plant. Scale ages for all fish examined were determined by C.J. Read. G. Carder reviewed the manuscript and provided useful comments.

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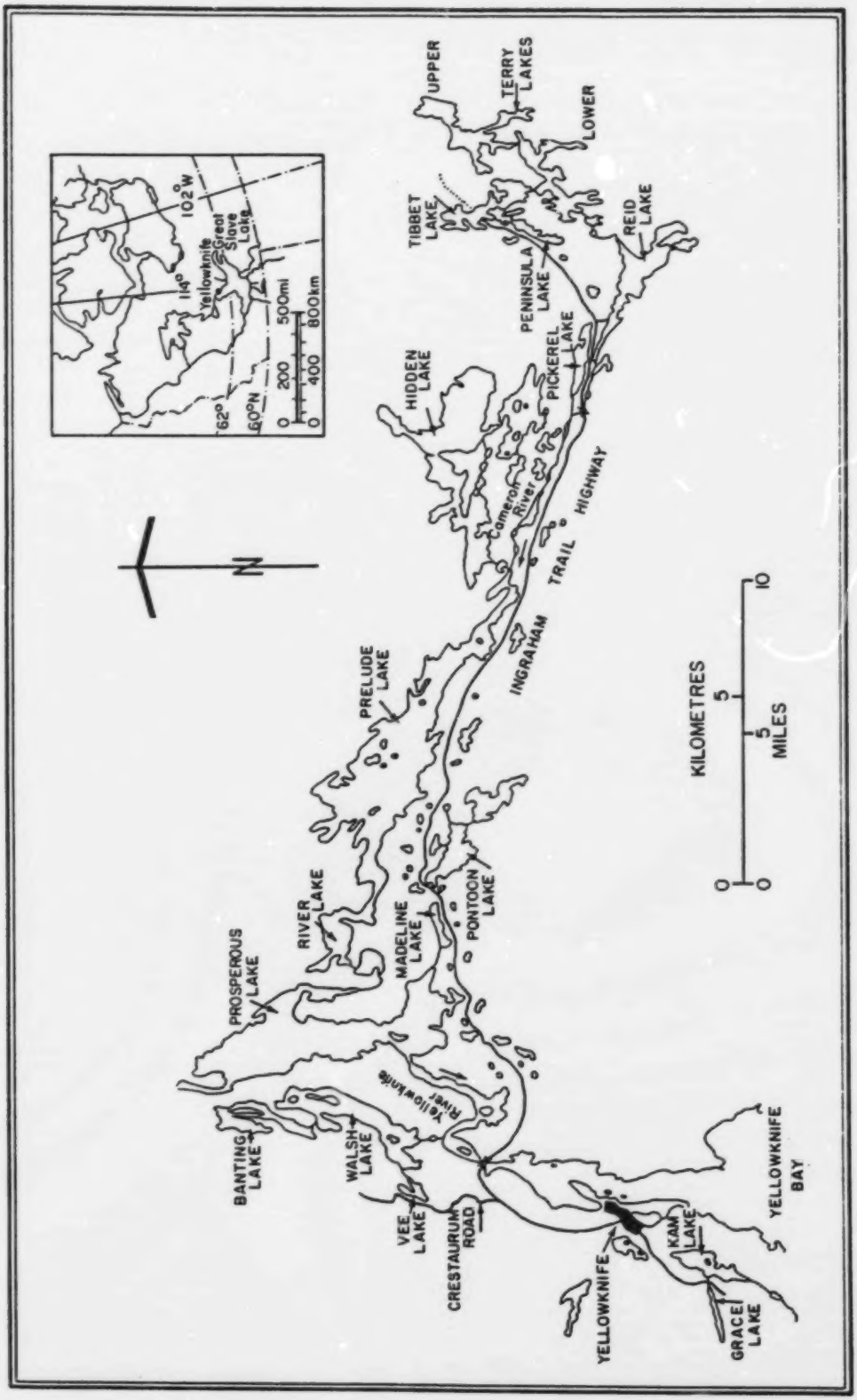


Fig. 1. Map of the study area showing the location of Prosperous and Prelude Lakes.

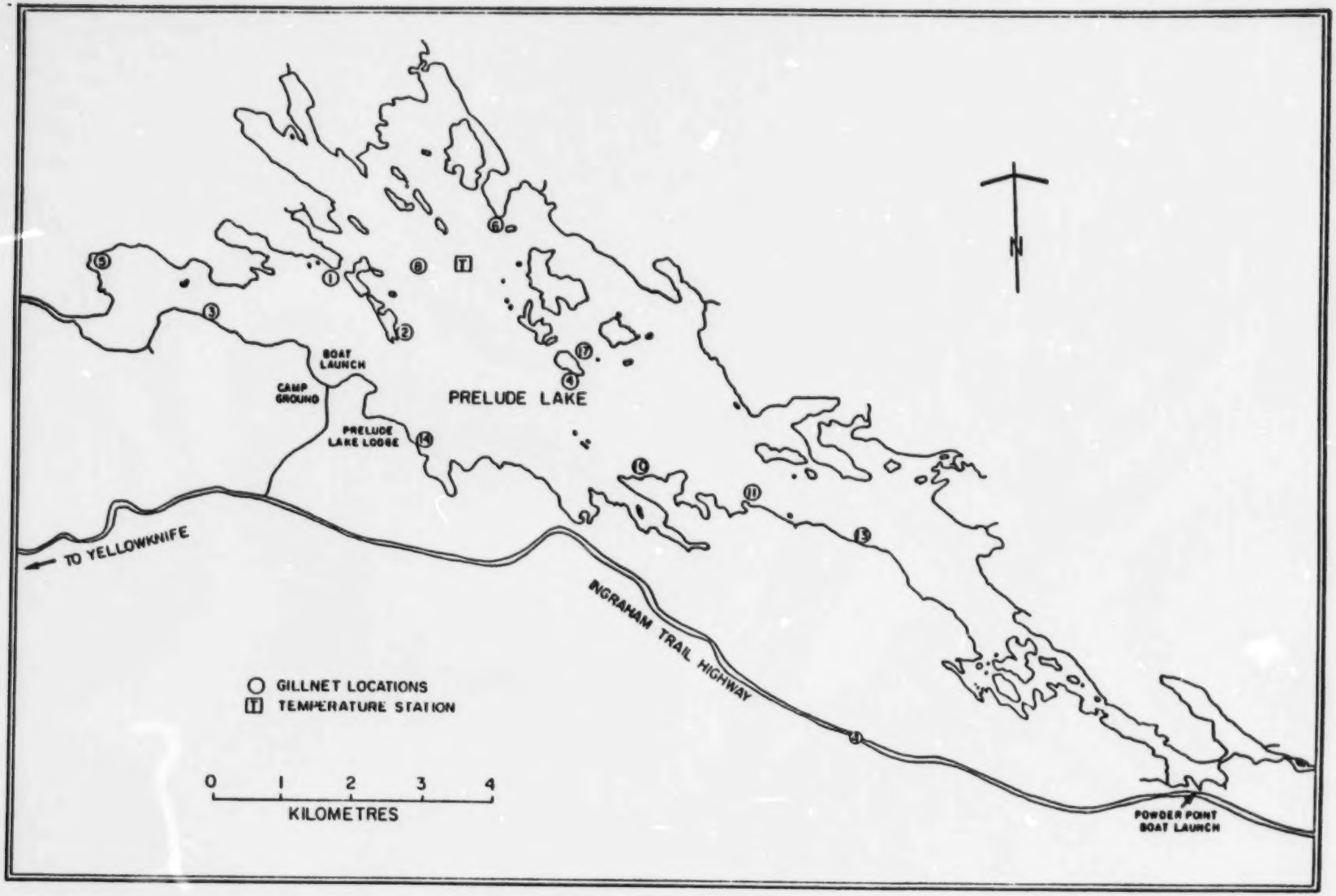


Fig. 2. Map of Prelude Lake showing gill net locations, 1979.

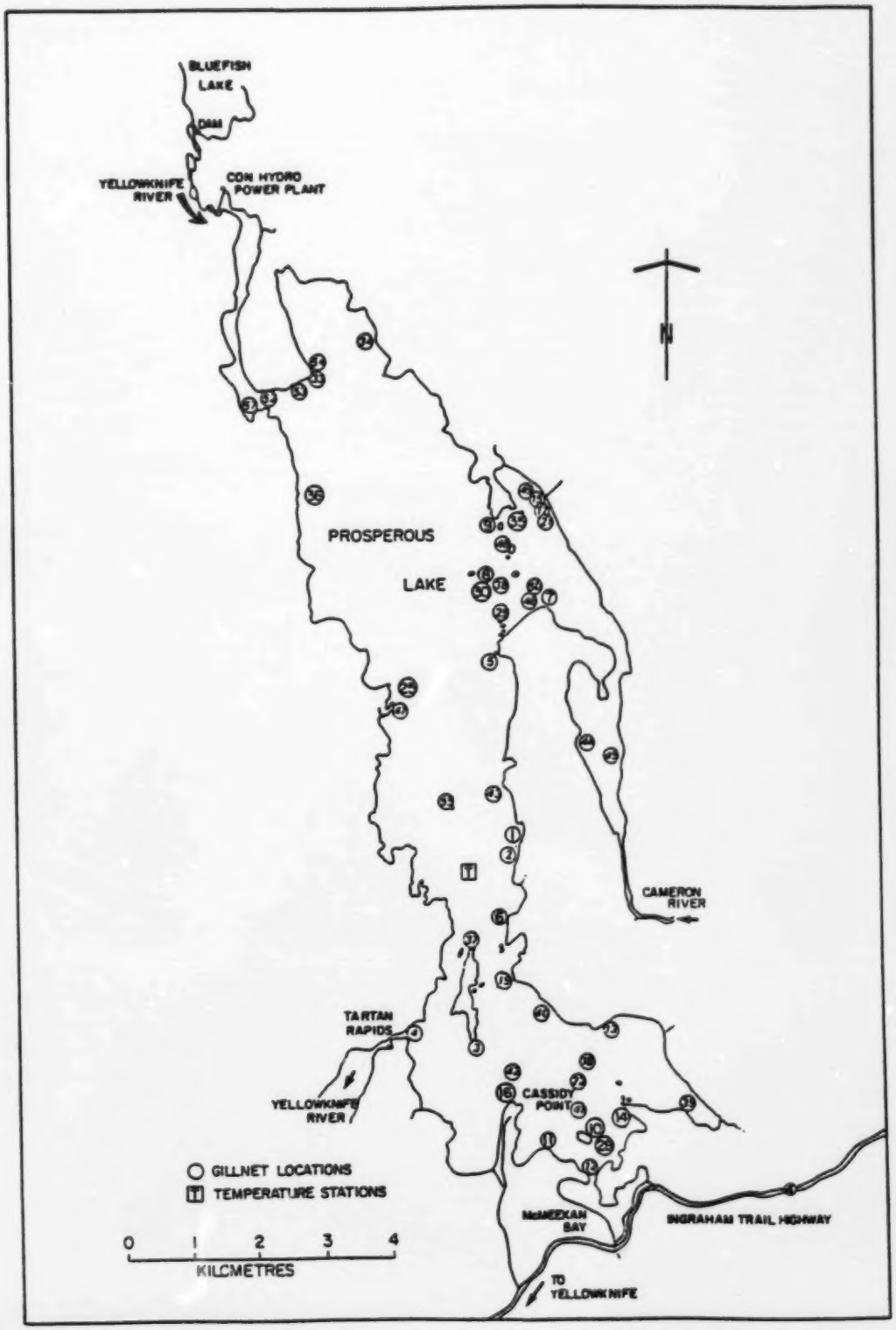


Fig. 3. Map of Prosperous Lake showing gill net locations, 1979.

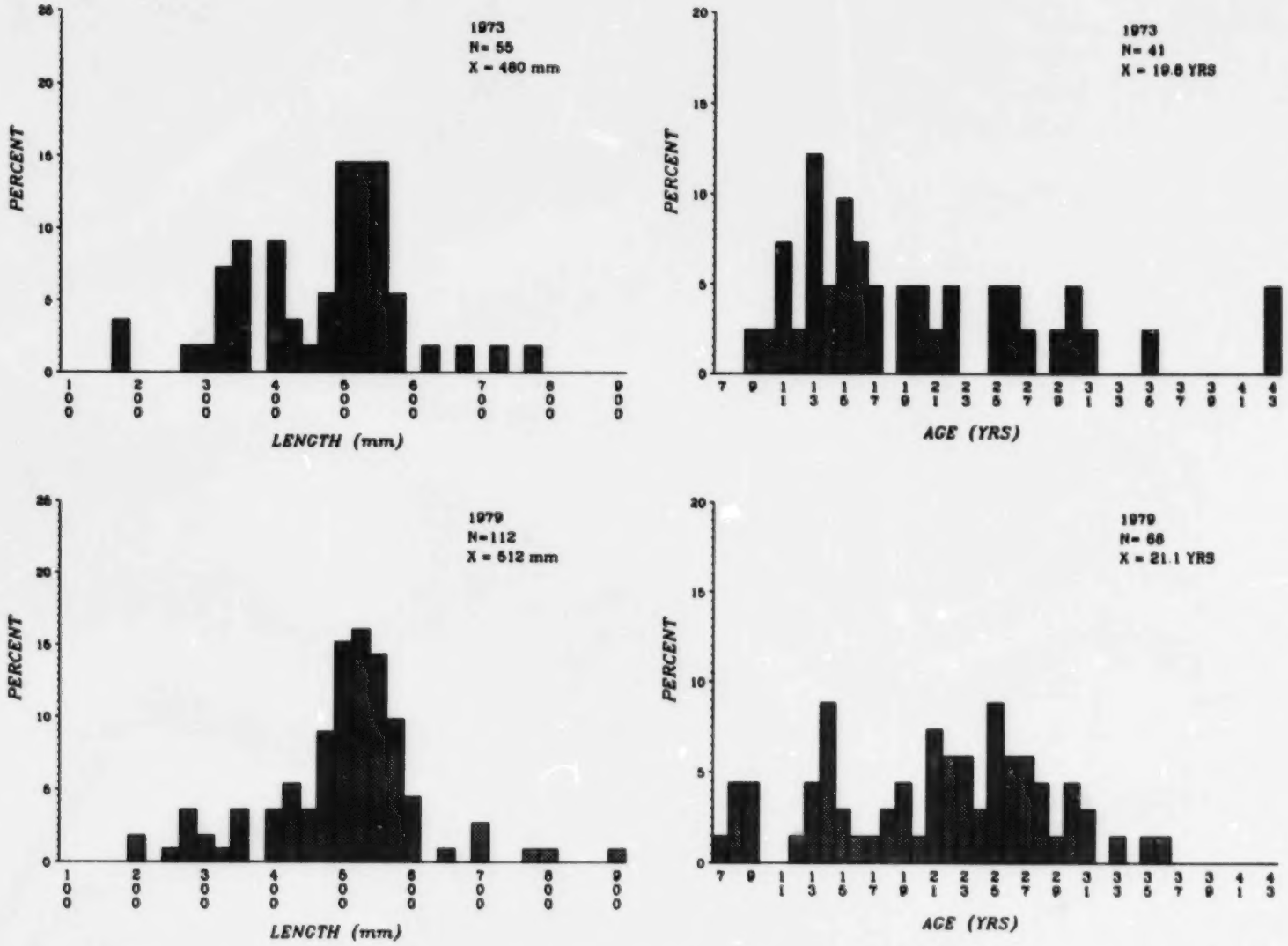


Fig. 4. Length and age frequencies of lake trout caught by experimental gill nets, Prelude Lake.

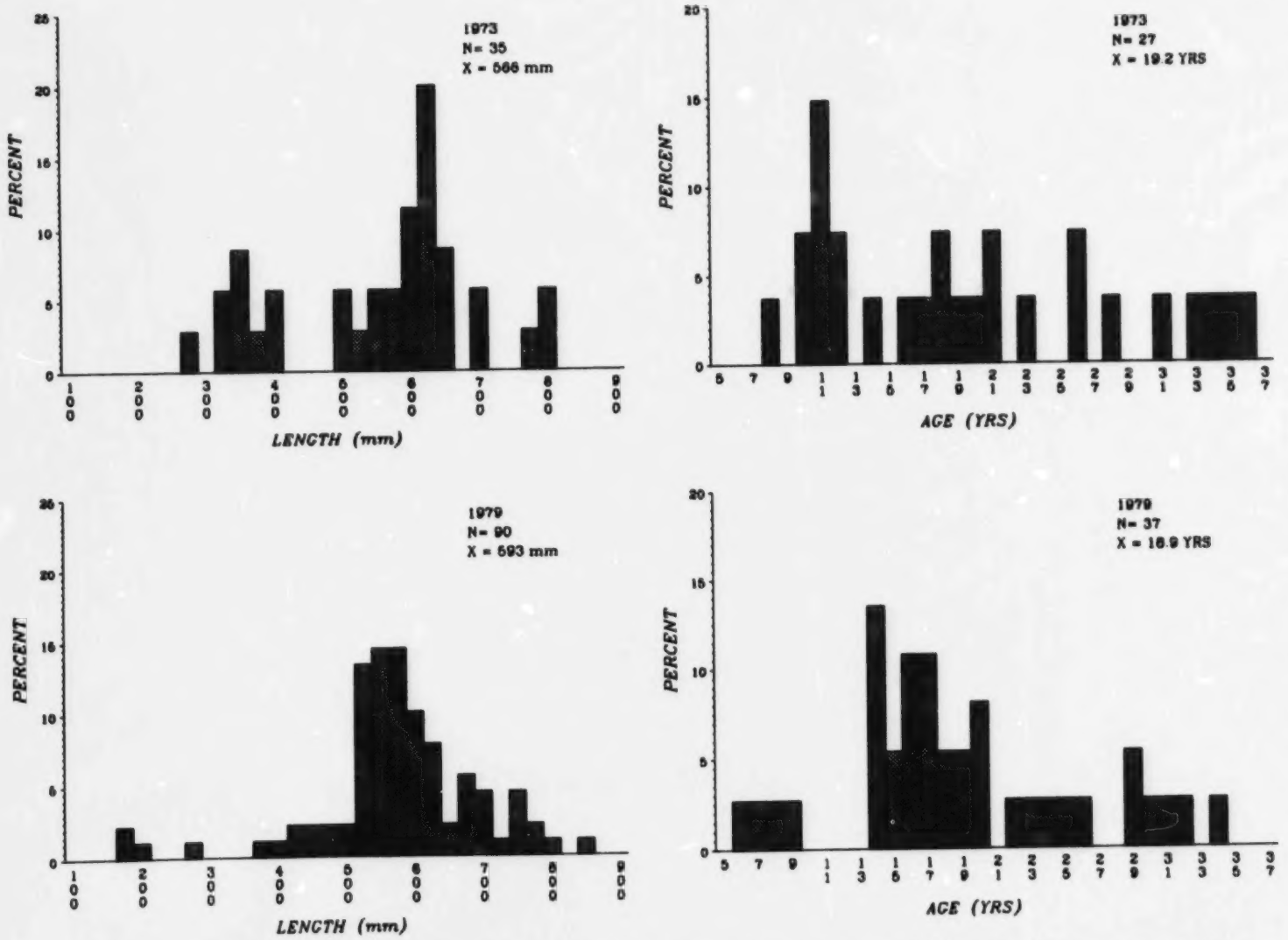


Fig. 5. Length and age frequencies of lake trout caught by experimental gill nets, Prosperous Lake.

Table 1. Summary of harvest catch per unit effort (CPUE) for lake trout and northern pike from Prelude Lake, 1973 and 1979.

Area	Year	Angler Interviews	Species	Harvest	CPUE No. Caught /Angler Hour	CPUE No. Caught /Angler Day
Prelude Lake	1973	48	Lake trout	19	0.11	0.40
			Northern Pike	56	0.33	1.12
	1979	31	Lake trout	16	0.14	0.52
			Northern Pike	52	0.46	1.68

Table 2. Biological data by length interval for lake trout caught by angling in Prelude Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
375	.	.	.	.	.	.	1	385	575	.	1.01	0	1	385	575	.	1.01	0
425	.	.	.	.	.	.	1	438	890	.	1.06	100	1	438	890	.	1.06	100
450	1	474	1225	.	1.15	100	3	461	980	108	1.00	100	4	464	1041	151	1.04	100
475	.	.	.	.	.	.	3	491	1287	137	1.09	100	3	491	1287	137	1.09	100
500	4	511	1438	138	1.07	100	4	514	1453	219	1.07	100	8	512	1445	169	1.07	100
525	2	539	1675	35	1.07	100	1	549	1705	.	1.03	100	3	542	1685	30	1.06	100
575	1	577	2260	.	1.18	100	1	577	1950	.	1.02	100	2	577	2105	219	1.10	100
TOTAL	8						14						22					
MEAN		522	1573	326	1.10			490	1266	379	1.05			501	1378	384	1.06	

Table 3. Biological data by age group for lake trout caught by angling in Prelude Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
12	-	-	-	-	-	-	-	1	385	-	575	-	1.01	0	1	385	-	575	-	1.01	0
14	1	474	-	1225	-	1.15	100	2	466	39	1145	361	1.11	100	3	468	28	1172	259	1.13	100
15	1	502	-	1350	-	1.07	100	1	521	-	1650	-	1.17	100	2	512	13	1500	212	1.12	100
16	1	537	-	1700	-	1.10	100	2	464	14	1033	81	1.03	100	3	488	43	1255	390	1.05	100
17	3	514	9	1467	153	1.08	100	-	-	-	-	-	-	-	3	514	9	1467	153	1.08	100
18	-	-	-	-	-	-	-	2	527	31	1608	138	1.10	100	2	527	31	1608	138	1.10	100
24	1	577	-	2260	-	1.18	100	-	-	-	-	-	-	-	1	577	-	2260	-	1.18	100
26	-	-	-	-	-	-	-	2	548	42	1730	311	1.05	100	2	548	42	1730	311	1.05	100
TOTAL	7							10							17						
MEAN		519	32	1562	351	1.10			491	56	1326	427	1.08			503	49	1423	404	1.09	
MEAN AGE	17.1							17.5							17.4						

Table 4. Biological data by length interval for lake trout caught by angling in Prelude Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
425	2	446	775	106	0.87	100	.	.	.	.	.	.	2	446	775	106	0.87	100
450	2	459	900	141	0.93	100	.	.	.	.	.	.	2	459	900	141	0.93	100
475	.	.	.	.	.	.	1	482	1000	.	0.89	100	1	482	1000	.	0.89	100
500	.	.	.	.	.	.	1	524	1400	.	0.97	100	1	524	1400	.	0.97	100
525	1	525	1700	.	1.17	100	.	.	.	.	.	.	1	525	1700	.	1.17	100
550	.	.	.	.	.	.	1	558	1400	.	0.81	100	1	558	1400	.	0.81	100
TOTAL	5						3						8					
MEAN		467	1010	401	0.96			521	1267	231	0.89			487	1106	353	0.93	

Table 5. Biological data by age group for lake trout caught by angling in Prelude Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED					
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
16	1	525	-	1700	-	1.17	100	-	-	-	-	-	-	-	1	525	-	1700	-	1.17	100
20	1	448	-	850	-	0.95	100	-	-	-	-	-	-	-	1	448	-	850	-	0.95	100
TOTAL	2							0							2						
MEAN		487	54	1275	601	1.06			-	-	-	-	-			487	54	1275	601	1.06	
MEAN AGE	18.0								-						18.0						

Table 6. Biological data by length interval for northern pike caught by angling in Prelude Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
300	1	315	200	.	0.64	0	.	.	.	.	.	.	1	315	200	.	0.64	0
340	1	358	400	.	0.87	0	.	.	.	.	.	.	1	358	400	.	0.87	0
380	.	.	.	.	.	.	1	385	575	.	1.01	0	1	385	575	.	1.01	0
400	1	412	500	.	0.71	0	.	.	.	.	.	.	1	412	500	.	0.71	0
440	1	456	600	.	0.63	0	.	.	.	.	.	.	1	456	600	.	0.63	0
520	1	524	1125	.	0.78	0	.	.	.	.	.	.	1	524	1125	.	0.78	0
540	3	553	1183	29	0.70	0	.	.	.	.	.	.	3	553	1183	29	0.70	0
600	1	605	1400	.	0.63	0	.	.	.	.	.	.	1	605	1400	.	0.63	0
640	3	649	1478	353	0.54	0	.	.	.	.	.	.	3	649	1478	353	0.54	0
660	1	679	2000	.	0.64	0	.	.	.	.	.	.	1	679	2000	.	0.64	0
680	1	682	1900	.	0.60	0	.	.	.	.	.	.	1	682	1900	.	0.60	0
700	1	705	2440	.	0.70	0	.	.	.	.	.	.	1	705	2440	.	0.70	0
760	1	764	3050	.	0.68	0	.	.	.	.	.	.	1	764	3050	.	0.68	0
TOTAL	16						1						17					
MEAN		569	1350	764	0.66			385	575	.	1.01			558	1304	763	0.68	

Table 7. Biological data by age group for northern pike caught by angling in Prelude Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	3	362	49	367	153	0.74	-	-	-	-	-	-	-	-	3	362	49	367	153	0.74	-
4	1	456	-	600	-	0.63	-	-	-	-	-	-	-	-	1	456	-	600	-	0.63	-
6	1	605	-	1400	-	0.63	-	-	-	-	-	-	-	-	1	605	-	1400	-	0.63	-
7	3	640	70	1700	436	0.64	-	-	-	-	-	-	-	-	3	640	70	1700	436	0.64	-
8	4	593	69	1234	175	0.62	-	-	-	-	-	-	-	-	4	593	69	1234	175	0.62	-
10	3	655	104	2008	963	0.68	-	-	-	-	-	-	-	-	3	655	104	2008	963	0.68	-
13	1	705	-	2440	-	0.70	-	-	-	-	-	-	-	-	1	705	-	2440	-	0.70	-
TOTAL	16							0							16						
MEAN		569	129	1350	764	0.66			-	-	-	-	-			569	129	1350	764	0.66	
MEAN AGE		7.2							-							7.2					

Table 8. Catch and catch per unit effort (CPUE) for fish caught by experimental gill nets in Prelude Lake, 1979.

Fish Species		Mesh Size (mm) 38	64	89	114	139	Total	CPUE[1]
Lake trout	N	5	14	8	23	15	65	4.12
	%	7.7	21.5	12.3	35.9	23.1	18.0	
Lake whitefish	N	68	57	49	71	25	270	17.12
	%	25.2	21.1	18.1	26.3	9.3	74.8	
Northern Pike	N	-	3	2	-	-	5	0.32
	%		60.0	40.0			1.4	
Lake cisco	N	19	-	-	-	-	19	1.21
	%	100.0					5.3	
Burbot	N	-	-	-	2	-	2	0.13
	%				100.0		0.6	
		92	74	59	96	40	361	22.90
		25.5	20.5	16.3	26.6	11.1		

[1] No. fish/100 m of gill net/24 h.

Table 9. Biological data by length interval for lake trout caught by experimental gill nets in Prelude Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
175	.	.	.	.	.	.	1	194	50	.	0.68	0	2	189	75	35	1.16	0
275	.	.	.	.	.	.	1	293	275	.	1.09	0	1	293	275	.	1.09	0
300	.	.	.	.	.	.	1	311	325	.	1.08	0	1	311	325	.	1.08	0
325	1	344	425	.	1.04	100	3	335	400	43	1.06	0	4	337	406	37	1.06	25
350	1	352	550	.	1.26	100	4	354	400	168	0.90	25	5	353	430	160	0.97	40
400	1	421	830	.	1.11	0	4	403	713	43	1.09	25	5	407	736	65	1.09	20
425	.	.	.	.	.	.	2	431	800	0	1.00	100	2	431	800	0	1.00	100
450	.	.	.	.	.	.	1	456	990	.	1.04	100	1	456	990	.	1.04	100
475	1	487	1340	.	1.16	100	2	489	1400	177	1.20	100	3	488	1380	130	1.19	100
500	4	513	1494	66	1.11	100	4	521	1658	77	1.17	100	8	517	1576	110	1.14	100
525	3	540	1792	232	1.14	100	5	530	1747	125	1.17	100	8	534	1764	158	1.16	100
550	6	558	1950	241	1.12	100	2	559	2050	71	1.18	100	8	558	1975	210	1.14	100
575	1	595	2325	.	1.10	100	2	588	2575	318	1.26	100	3	590	2492	267	1.21	100
625	.	.	.	.	.	.	1	630	3900	.	1.56	100	1	630	3900	.	1.56	100
675	.	.	.	.	.	.	1	684	4125	.	1.29	100	1	684	4125	.	1.29	100
725	.	.	.	.	.	.	1	742	5550	.	1.36	100	1	742	5550	.	1.36	100
775	.	.	.	.	.	.	1	780	6065	.	1.28	100	1	780	6065	.	1.28	100
TOTAL	18						36						55					
MEAN		512	1584	540	1.13			472	1554	1420	1.12			480	1538	1200	1.13	

Table 10. Biological data by age group for lake trout caught by experimental gill nets in Prelude Lake, 1973.

AGE (YR)	MALES N	MALES LENGTH(MM) MEAN	MALES LENGTH(MM) SD	MALES WEIGHT(G) MEAN	MALES WEIGHT(G) SD	MALES K	MALES % MAT	FEMALES N	FEMALES LENGTH(MM) MEAN	FEMALES LENGTH(MM) SD	FEMALES WEIGHT(G) MEAN	FEMALES WEIGHT(G) SD	FEMALES K	FEMALES % MAT	COMBINED N	COMBINED LENGTH(MM) MEAN	COMBINED LENGTH(MM) SD	COMBINED WEIGHT(G) MEAN	COMBINED WEIGHT(G) SD	COMBINED K	COMBINED % MAT
9	-	-	-	-	-	-	-	1	293	-	275	-	1.09	0	1	293	-	275	-	1.09	0
10	-	-	-	-	-	-	-	1	325	-	375	-	1.09	0	1	325	-	375	-	1.09	0
11	1	344	-	425	-	1.04	100	2	346	18	413	53	1.00	50	3	345	13	417	38	1.01	67
12	1	352	-	550	-	1.26	100	-	-	-	-	-	-	-	1	352	-	550	-	1.26	100
13	-	-	-	-	-	-	-	5	400	27	630	114	1.06	20	5	400	27	680	114	1.06	20
14	-	-	-	-	-	-	-	2	416	23	775	35	1.08	100	2	416	23	775	35	1.08	100
15	1	421	-	830	-	1.11	0	3	488	31	1322	357	1.12	100	4	471	42	1199	381	1.12	75
16	2	508	9	1450	71	1.11	100	1	532	-	1650	-	1.10	100	3	516	16	1517	126	1.10	100
17	1	487	-	1340	-	1.16	100	1	525	-	1610	-	1.11	100	2	506	27	1475	191	1.14	100
19	1	556	-	2100	-	1.22	100	1	555	-	2000	-	1.17	100	2	556	1	2050	71	1.20	100
20	1	542	-	1900	-	1.19	100	1	520	-	1655	-	1.18	100	2	531	16	1778	173	1.19	100
21	1	540	-	1525	-	0.97	100	-	-	-	-	-	-	-	1	540	-	1525	-	0.97	100
22	-	-	-	-	-	-	-	2	556	36	2100	354	1.22	100	2	556	36	2100	354	1.22	100
25	2	555	6	1925	389	1.13	100	-	-	-	-	-	-	-	2	555	6	1925	389	1.13	100
26	2	578	25	2213	159	1.15	100	-	-	-	-	-	-	-	2	578	25	2213	159	1.15	100
27	-	-	-	-	-	-	-	1	528	-	1725	-	1.17	100	1	528	-	1725	-	1.17	100
29	1	553	-	1650	-	0.98	100	-	-	-	-	-	-	-	1	553	-	1650	-	0.98	100
30	2	545	31	1763	336	1.08	100	-	-	-	-	-	-	-	2	545	31	1763	336	1.08	100
31	-	-	-	-	-	-	-	1	780	-	6065	-	1.28	100	1	780	-	6065	-	1.28	100
35	-	-	-	-	-	-	-	1	562	-	2100	-	1.18	100	1	562	-	2100	-	1.18	100
43	-	-	-	-	-	-	-	2	686	79	4725	1167	1.46	100	2	686	79	4725	1167	1.46	100
TOTAL	16							25							41						
MEAN		510	75	1564	567	1.12			484	122	1634	1501	1.14			494	106	1606	1214	1.13	
MEAN AGE		21.1							19.0							19.8					

Table 11. Biological data by length interval for lake trout caught by experimental gill nets in Prelude lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
200	.	.	.	.	.	.	.	.	.	.	.	.	2	212	100	0	1.07	0
250	.	.	.	.	.	.	.	.	.	.	.	.	1	264	200	.	1.09	0
275	2	275	200	0	0.96	0	.	.	.	.	.	.	4	279	213	25	0.97	0
300	1	310	300	.	1.01	0	.	.	.	.	.	.	2	312	300	.	1.01	0
325	.	.	.	.	.	.	1	341	450	.	1.13	0	1	341	450	.	1.13	0
350	1	353	450	.	1.02	0	1	370	550	.	1.09	0	4	368	517	58	1.05	0
400	2	414	1025	460	1.44	0	2	412	775	35	1.11	50	4	413	900	303	1.28	25
425	3	436	900	87	1.09	33	2	430	1300	495	1.65	50	6	432	1060	336	1.31	33
450	3	464	1150	50	1.15	67	1	464	1400	.	1.40	100	4	464	1213	131	1.22	75
475	4	488	1575	119	1.36	100	1	490	1300	.	1.10	100	10	489	1520	160	1.31	50
500	6	515	1600	293	1.17	83	4	508	1513	155	1.16	100	17	513	1565	240	1.17	53
525	7	534	1879	191	1.23	100	5	534	1880	144	1.23	100	18	534	1879	166	1.23	67
550	5	562	1890	182	1.06	80	6	563	1983	350	1.11	100	16	562	1941	277	1.09	63
575	2	589	2175	106	1.06	100	3	586	2233	29	1.11	100	11	583	2210	65	1.09	45
600	.	.	.	.	.	.	1	611	3150	.	1.38	100	5	608	3150	.	1.38	20
650	.	.	.	.	.	.	1	670	3950	.	1.31	100	1	670	3950	.	1.31	100
700	.	.	.	.	.	.	1	710	3700	.	1.03	100	3	707	3700	.	1.03	33
775	.	.	.	.	.	.	1	780	5150	.	1.09	100	1	780	5150	.	1.09	100
800	.	.	.	.	.	.	.	.	.	.	.	.	1	805	.	.	.	0
900	.	.	.	.	.	.	.	.	.	.	.	.	1	910	10400	.	1.38	0
TOTAL MEAN	36	486	1450	575	1.17		30	532	1928	1006	1.19		112[a]	512	1669	1361	1.17	

a) Includes tagged fish

Table 12. Biological data by age group for lake trout caught by experimental gill nets in Prelude Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	200	-	100	-	1.25	0
8	1	275	-	200	-	0.96	0	-	-	-	-	-	-	-	3	271	6	200	0	1.00	0
9	2	293	25	250	71	0.98	0	-	-	-	-	-	-	-	3	292	18	250	50	0.99	0
12	-	-	-	-	-	-	-	1	370	-	550	-	1.09	0	1	370	-	550	-	1.09	0
13	-	-	-	-	-	-	-	2	373	45	600	212	1.14	50	3	373	32	583	153	1.11	33
14	4	415	42	788	236	1.07	25	2	426	9	875	106	1.13	0	6	419	33	817	194	1.09	17
15	2	443	43	950	354	1.07	50	-	-	-	-	-	-	-	2	443	43	950	354	1.07	50
16	1	455	-	1150	-	1.22	0	-	-	-	-	-	-	-	1	455	-	1150	-	1.22	0
17	1	525	-	1550	-	1.07	100	-	-	-	-	-	-	-	1	525	-	1550	-	1.07	100
18	1	415	-	1350	-	1.89	0	1	535	-	1850	-	1.21	100	2	475	85	1600	354	1.55	50
19	2	484	2	1650	0	1.46	100	1	508	-	1650	-	1.26	100	3	492	14	1650	0	1.39	100
20	-	-	-	-	-	-	-	1	427	-	1650	-	2.12	100	1	427	-	1650	-	2.12	100
21	2	526	23	1725	247	1.18	100	3	508	38	1750	328	1.33	100	5	515	31	1740	263	1.27	100
22	1	490	-	1600	-	1.36	100	3	533	37	1733	379	1.13	100	4	522	37	1700	316	1.19	100
23	3	534	28	1750	278	1.15	100	1	528	-	1700	-	1.15	100	4	533	23	1738	229	1.15	100
24	1	510	-	1800	-	1.36	100	1	570	-	2600	-	1.40	100	2	540	42	2200	566	1.38	100
25	3	532	3	2000	100	1.33	100	3	558	42	1983	419	1.13	100	6	545	30	1992	273	1.23	100
26	4	506	29	1475	429	1.13	75	-	-	-	-	-	-	-	4	506	29	1475	429	1.13	75
27	3	548	50	1883	437	1.13	100	1	554	-	1650	-	0.97	100	4	550	41	1825	375	1.09	100
28	1	557	-	1800	-	1.04	100	2	632	54	3100	1202	1.20	100	3	607	58	2667	1134	1.14	100
29	-	-	-	-	-	-	-	1	514	-	1300	-	0.96	100	1	514	-	1300	-	0.96	100
30	1	556	-	1700	-	0.99	0	2	589	31	2650	707	1.28	100	3	578	29	2333	742	1.18	67
31	1	547	-	1700	-	1.04	100	1	780	-	5150	-	1.09	100	2	664	165	3425	2440	1.06	100
33	-	-	-	-	-	-	-	1	570	-	1900	-	1.03	100	1	570	-	1900	-	1.03	100
35	1	574	-	2150	-	1.14	100	-	-	-	-	-	-	-	1	574	-	2150	-	1.14	100
36	-	-	-	-	-	-	-	1	710	-	3700	-	1.03	100	1	710	-	3700	-	1.03	100
TOTAL	35							28							68						
MEAN		483	80	1431	572	1.17			532	97	1948	1039	1.20			489	106	1558	895	1.18	
MEAN AGE	21.2							23.1							21.1						

Table 13. Biological data by length interval for lake whitefish caught by experimental gill nets in Prelude Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
160	1	164	40	.	0.91	0	.	.	.	.	.	.	2	164	40	0	0.91	0
170	.	.	.	.	.	.	.	.	.	.	.	.	2	175	63	18	1.16	0
180	.	.	.	.	.	.	.	.	.	.	.	.	1	188	45	.	0.68	0
200	.	.	.	.	.	.	.	.	.	.	.	.	2	205	100	28	1.17	0
220	1	224	150	.	1.33	0	1	222	150	.	1.37	0	2	223	150	0	1.35	0
230	2	236	175	35	1.33	0	.	.	.	.	.	.	2	236	175	35	1.33	0
250	3	254	167	14	1.02	0	.	.	.	.	.	.	4	255	185	39	1.12	0
260	5	264	235	42	1.27	0	.	.	.	.	.	.	6	263	238	38	1.30	0
270	3	275	245	18	1.18	0	.	.	.	.	.	.	4	274	234	27	1.13	0
280	2	280	275	35	1.25	0	1	284	300	.	1.31	0	3	281	283	29	1.27	0
290	1	296	375	.	1.45	0	.	.	.	.	.	.	2	296	313	88	1.21	0
300	4	305	395	25	1.39	0	4	304	344	13	1.23	0	10	305	356	43	1.26	0
310	5	314	415	42	1.34	0	1	319	420	.	1.29	0	6	315	416	38	1.33	0
320	2	327	423	4	1.21	0	2	321	430	42	1.30	0	4	324	426	25	1.26	0
330	4	334	475	50	1.28	0	3	333	425	43	1.15	0	7	334	454	51	1.22	0
340	1	348	475	.	1.13	0	3	343	500	0	1.24	0	4	345	494	12	1.21	0
350	7	355	525	25	1.18	0	3	354	542	14	1.22	0	10	355	530	23	1.19	0
360	2	361	588	18	1.25	0	5	364	645	57	1.34	0	8	363	625	52	1.30	0
370	6	374	680	82	1.30	0	3	378	708	14	1.31	0	9	375	689	67	1.30	0
380	5	385	760	55	1.33	0	2	386	750	0	1.31	0	7	385	757	45	1.33	0
390	5	396	810	68	1.31	0	7	394	821	83	1.34	0	12	395	817	74	1.33	0
400	7	405	925	155	1.39	0	7	404	823	115	1.25	0	14	404	874	141	1.32	0
410	9	414	961	65	1.35	0	9	414	986	72	1.39	0	18	414	974	68	1.37	0
420	7	424	945	112	1.24	0	5	425	1005	91	1.31	0	12	425	970	104	1.27	0
430	10	436	1059	76	1.28	0	6	433	1100	96	1.36	0	16	435	1074	84	1.31	0
440	7	444	1054	74	1.21	0	7	443	1099	57	1.26	0	14	444	1076	68	1.23	0
450	5	453	1260	96	1.36	0	4	452	1145	33	1.24	0	9	452	1209	93	1.31	0
460	2	460	1250	212	1.28	0	5	464	1388	56	1.39	0	7	463	1349	119	1.36	0
470	2	472	1338	53	1.28	0	1	477	1400	.	1.29	0	3	473	1358	52	1.28	0
480	1	486	1750	.	1.52	0	1	484	1450	.	1.28	0	2	485	1600	212	1.40	0
500	.	.	.	.	.	.	1	504	1700	.	1.33	0	1	504	1700	.	1.33	0
510	.	.	.	.	.	.	1	512	1500	.	1.12	0	1	512	1500	.	1.12	0
TOTAL	109						82						204					
MEAN		373	738	358	1.28			399	873	330	1.30			376	758	372	1.28	

Table 14. Biological data by age group for lake whitefish caught by experimental gill nets in Prelude Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
3	1	164	-	40	-	0.91	-	-	-	-	-	-	-	-	4	170	7	51	17	1.03	-
4	3	258	23	192	52	1.10	-	1	222	-	150	-	1.37	-	6	231	34	142	72	1.05	-
5	5	264	40	240	110	1.26	-	-	-	-	-	-	-	-	6	254	43	220	110	1.28	-
6	7	300	50	339	196	1.14	-	1	346	-	500	-	1.21	-	9	300	49	347	182	1.18	-
7	5	283	27	312	80	1.37	-	2	321	17	375	35	1.13	-	8	303	37	364	117	1.29	-
8	1	263	-	200	-	1.10	-	5	397	69	945	440	1.39	-	7	360	84	732	511	1.29	-
9	5	359	70	662	356	1.34	-	7	390	57	789	328	1.25	-	13	368	68	698	345	1.30	-
10	7	382	73	813	388	1.37	-	6	434	72	1103	426	1.28	-	15	393	77	860	448	1.29	-
11	10	350	28	534	130	1.23	-	9	362	44	653	321	1.30	-	19	356	36	590	241	1.26	-
12	5	366	15	609	87	1.24	-	5	359	18	585	132	1.24	-	10	363	16	597	106	1.24	-
13	4	376	18	650	91	1.22	-	5	369	29	695	209	1.35	-	9	372	23	675	160	1.29	-
14	5	383	26	715	197	1.25	-	2	405	10	888	18	1.34	-	7	389	24	764	181	1.28	-
15	12	412	20	919	103	1.31	-	5	434	24	1066	130	1.31	-	17	419	22	962	128	1.31	-
16	13	419	25	963	141	1.30	-	16	418	22	976	137	1.34	-	29	418	23	970	136	1.32	-
17	7	421	23	999	100	1.34	-	7	427	34	1025	231	1.31	-	14	424	28	1012	172	1.32	-
18	5	444	7	1097	173	1.25	-	2	446	45	1225	247	1.38	-	7	445	19	1134	184	1.29	-
19	3	465	19	1458	267	1.44	-	3	426	20	983	126	1.26	-	6	446	27	1221	320	1.35	-
21	2	451	1	1288	53	1.41	-	-	-	-	-	-	-	-	2	451	1	1288	53	1.41	-
TOTAL	100							76							188						
MEAN		371	69	725	357	1.28			398	52	866	317	1.30			374	73	748	368	1.28	
MEAN AGE		12.3							12.9							12.1					

Table 15. Biological data by length interval for lake whitefish caught by experimental gill nets in Prelude Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
140	.	.	.	.	.	.	.	.	.	.	.	.	1	143	50	.	1.71	0
160	.	.	.	.	.	.	.	.	.	.	.	.	4	168	50	0	1.06	0
170	.	.	.	.	.	.	.	.	.	.	.	.	6	173	58	20	1.13	0
180	.	.	.	.	.	.	.	.	.	.	.	.	10	182	60	21	1.00	0
190	2	197	100	0	1.31	0	.	.	.	.	.	.	18	194	94	16	1.29	0
200	.	.	.	.	.	.	.	.	.	.	.	.	19	203	100	29	1.20	0
210	2	213	100	0	1.04	0	.	.	.	.	.	.	18	213	108	19	1.12	0
220	.	.	.	.	.	.	.	.	.	.	.	.	3	222	117	29	1.08	0
230	.	.	.	.	.	.	.	.	.	.	.	.	2	235	150	0	1.16	0
240	.	.	.	.	.	.	.	.	.	.	.	.	3	246	200	0	1.34	0
250	.	.	.	.	.	.	1	258	200	.	1.16	0	7	256	193	35	1.16	0
260	.	.	.	.	.	.	.	.	.	.	.	.	4	263	200	0	1.10	0
270	4	275	225	29	1.09	0	1	272	200	.	0.99	0	7	274	214	24	1.04	0
280	2	282	275	35	1.22	0	1	280	250	.	1.14	0	5	282	270	27	1.21	0
290	2	293	275	35	1.09	0	.	.	.	.	.	.	4	293	275	29	1.09	0
300	2	302	350	0	1.27	0	2	307	325	35	1.13	50	5	304	350	35	1.25	20
310	5	315	370	27	1.18	0	4	314	350	41	1.13	0	12	315	367	33	1.17	0
320	1	329	400	.	1.12	0	1	325	450	.	1.31	0	6	325	425	27	1.23	0
330	4	333	500	82	1.35	0	3	332	450	0	1.23	0	10	333	475	54	1.28	0
340	2	345	500	71	1.22	0	3	344	483	76	1.18	33	7	343	507	67	1.25	14
350	4	355	525	50	1.18	0	5	352	540	55	1.23	40	12	354	550	67	1.24	17
360	3	362	600	50	1.27	0	1	365	600	.	1.23	0	9	362	600	35	1.26	0
370	13	375	665	47	1.27	23	13	373	650	58	1.25	46	36	374	675	59	1.29	25
380	22	385	770	73	1.35	36	5	386	790	42	1.37	60	39	385	783	71	1.37	28
390	23	395	820	69	1.33	57	20	395	843	80	1.37	80	56	395	827	69	1.34	52
400	17	404	862	78	1.30	71	25	404	874	66	1.32	76	52	404	874	74	1.32	60
410	15	413	917	56	1.30	67	15	415	980	82	1.38	80	44	414	967	77	1.36	50
420	16	423	1022	73	1.35	69	15	424	1033	88	1.36	87	41	424	1029	73	1.35	59
430	15	434	1077	75	1.32	93	9	432	1078	79	1.33	89	32	433	1083	73	1.33	69
440	7	442	1086	128	1.26	71	4	445	1163	75	1.32	100	12	443	1113	109	1.28	75
450	3	450	1233	76	1.35	100	2	454	1275	106	1.37	100	6	452	1258	74	1.37	83
460	4	465	1350	204	1.34	100	3	465	1233	153	1.22	100	9	464	1278	162	1.27	78
470	.	.	.	.	.	.	2	473	1475	35	1.40	100	2	473	1475	35	1.40	100
480	2	482	1550	283	1.38	100	.	.	.	.	.	.	2	482	1550	283	1.38	100
490	1	498	1650	.	1.34	0	1	498	1650	.	1.34	100	2	498	1650	0	1.34	50
540	.	.	.	.	.	.	1	545	1800	.	1.11	100	1	545	1800	.	1.11	100
TOTAL	171						137						506					
MEAN		390	813	291	1.30			398	858	275	1.31			358	695	374	1.28	

Table 16. Biological data by age group lake whitefish caught by experimental gill nets in Prelude Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	178	7	63	25	1.14	0
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	173	7	50	0	0.98	0
4	3	232	61	183	144	1.29	0	-	-	-	-	-	-	-	23	202	25	102	57	1.19	0
5	2	213	4	100	0	1.04	0	-	-	-	-	-	-	-	25	223	34	146	97	1.20	0
6	2	286	8	250	0	1.08	0	3	345	77	550	312	1.21	0	11	284	54	295	217	1.14	0
7	4	343	55	575	312	1.29	25	2	360	66	650	495	1.24	0	8	330	56	506	329	1.23	13
8	7	313	51	407	270	1.20	14	7	352	76	593	392	1.18	43	16	325	64	463	330	1.17	25
9	2	315	1	375	35	1.21	0	4	349	57	575	393	1.21	50	6	337	47	508	322	1.21	33
10	4	380	48	750	372	1.28	50	7	348	18	529	86	1.25	14	11	360	34	609	242	1.26	27
11	7	354	40	571	212	1.24	14	6	388	40	750	243	1.25	50	13	369	42	654	236	1.24	31
12	14	396	22	814	126	1.30	57	7	377	26	686	206	1.24	71	21	390	25	771	164	1.28	62
13	15	384	12	710	99	1.25	27	6	392	24	775	99	1.28	67	21	386	16	729	101	1.26	38
14	23	406	24	902	165	1.33	52	19	401	23	882	181	1.35	68	42	404	23	893	171	1.34	60
15	25	409	29	904	216	1.31	68	22	412	20	936	142	1.34	86	47	410	25	919	184	1.32	77
16	18	414	21	933	104	1.32	61	18	411	18	950	131	1.36	83	36	413	19	942	117	1.34	72
17	8	423	16	1044	112	1.38	100	7	418	20	979	122	1.34	86	15	421	17	1013	117	1.36	93
18	5	439	18	1150	173	1.35	80	5	435	19	1140	152	1.38	100	10	437	18	1145	154	1.37	90
19	3	441	23	1150	218	1.33	67	1	498	-	1650	-	1.34	100	4	456	34	1275	307	1.33	75
20	2	463	28	1450	424	1.44	50	1	472	-	1450	-	1.38	100	3	466	21	1450	300	1.42	67
TOTAL	144							115							320						
MEAN		389	53	811	292	1.30			396	41	845	264	1.31			358	83	693	375	1.27	
MEAN AGE	13.4							13.5							11.7						

Table 17. Biological data by length interval for northern pike caught by experimental gill nets in Prelude Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
560	3	571	1353	131	0.73	0	.	.	.	.	.	.	3	571	1353	131	0.73	0
600	1	609	1750	.	0.77	0	1	606	1450	.	0.65	0	2	608	1600	212	0.71	0
620	2	630	1565	92	0.63	0	2	626	1675	106	0.68	0	4	628	1620	103	0.65	0
TOTAL	6						3						9					
MEAN		597	1490	188	0.70			619	1600	150	0.67			605	1527	176	0.69	

Table 18. Biological data by age group for northern pike caught by experimental gill nets in Prelude Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
6	1	623	-	1630	-	0.67	-	-	-	-	-	-	-	-	1	623	-	1630	-	0.67	-
8	-	-	-	-	-	-	-	1	606	-	1450	-	0.65	-	1	606	-	1450	-	0.65	-
9	4	581	19	1453	225	0.74	0	1	627	-	1750	-	0.71	-	5	590	27	1512	236	0.73	0
11	1	637	-	1500	-	0.58	-	1	625	-	1600	-	0.66	-	2	631	8	1550	71	0.62	-
TOTAL	6							3							9						
MEAN		597	30	1490	188	0.70			619	12	1600	150	0.67			605	27	1527	176	0.69	
MEAN AGE	8.8							9.3							9.0						

Table 19. Biological data by length interval for northern pike caught by experimental gill nets in Prelude Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
400	1	406	500	.	0.75	100	.	.	.	.	.	.	1	406	500	.	0.75	100
440	.	.	.	.	.	.	.	.	.	.	.	.	1	444	600	.	0.69	0
480	1	485	750	.	0.66	0	.	.	.	.	.	.	1	485	750	.	0.66	0
540	2	544	1025	106	0.64	100	.	.	.	.	.	.	2	544	1025	106	0.64	100
560	1	563	1000	.	0.56	100	.	.	.	.	.	.	1	563	1000	.	0.56	100
620	1	620	1750	.	0.73	100	.	.	.	.	.	.	1	620	1750	.	0.73	100
TOTAL	6						0						7					
MEAN		527	1008	421	0.66			.	.	.	.			515	950	414	0.67	

Table 20. Biological data by age group for northern pike caught by experimental gill nets in Prelude Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED					
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
5	1	406	-	500	-	0.75	100	-	-	-	-	-	-	-	2	425	27	550	71	0.72	50
6	2	515	42	925	247	0.67	50	-	-	-	-	-	-	-	2	515	42	925	247	0.67	50
7	1	544	-	950	-	0.59	100	-	-	-	-	-	-	-	1	544	-	950	-	0.59	100
9	2	592	40	1375	530	0.65	100	-	-	-	-	-	-	-	2	592	40	1375	530	0.65	100
TOTAL	6							0							7						
MEAN		527	73	1008	421	0.66			-	-	-	-	-			515	74	950	414	0.67	
MEAN AGE	7.0							-							6.7						

Table 21. Biological data by length interval for lake cisco caught by experimental gill nets in Prelude Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
160	.	.	.	.	.	.	.	.	.	.	.	.	3	162	42	29	1.00	0
TOTAL	0						0						3					
MEAN		.	.	.	.			.	.	.	.			162	42	29	1.00	

Table 22. Biological data by length interval for lake cisco caught by experimental gill nets in Prelude Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
130	.	.	.	.	.	.	.	.	.	.	.	.	1	138	50	.	1.90	0
140	.	.	.	.	.	.	.	.	.	.	.	.	2	146	50	0	1.61	0
150	.	.	.	.	.	.	.	.	.	.	.	.	2	152	50	.	1.37	0
160	1	165	50	.	1.11	100	2	166	75	35	1.66	100	7	167	58	20	1.26	43
170	3	174	50	0	0.95	100	6	174	50	0	0.95	100	17	175	50	0	0.94	53
180	2	183	50	0	0.82	100	9	184	50	0	0.81	100	25	184	56	16	0.90	44
190	3	192	67	29	0.93	67	4	193	50	0	0.70	100	16	193	59	20	0.83	38
200	.	.	.	.	.	.	2	200	50	0	0.63	100	2	200	50	0	0.63	100
210	1	210	50		0.54	100	3	212	67	29	0.71	100	5	211	60	22	0.64	80
TOTAL	10						26						77					
MEAN		184	55	16	0.89			186	54	14	0.86			182	55	15	0.95	

Table 23. Biological data by age group lake cisco caught by experimental gill nets in Prelude Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	-	-	-	-	-	-	-	2	174	11	50	0	0.96	100	2	174	11	50	0	0.96	100
4	5	180	13	60	22	1.02	80	9	187	11	50	0	0.78	100	15	183	12	53	13	0.87	93
5	3	183	8	50	0	0.82	100	6	189	15	58	20	0.86	100	9	187	13	56	17	0.84	100
6	-	-	-	-	-	-	-	1	190	-	50	-	0.73	100	1	190	-	50	-	0.73	100
TOTAL	8							18							27						
MEAN		181	11	56	18	0.94			186	12	53	12	0.82			184	12	54	13	0.87	
MEAN AGE	4.4							4.3							4.3						

Table 24. Biological data by length interval for burbot caught by experimental gill nets in Prelude Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
570	.	.	.	.	.	.	.	.	.	.	.	.	1	571	1250	.	0.67	0
TOTAL	0						0						1					
MEAN		.	.	.	.			.	.	.	.			571	1250	.	0.67	

Table 25. Biological data by age group for burbot caught by experimental gill nets in Prelude Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	571	-	1250	-	0.67	-
TOTAL	0							0							1						
MEAN		-	-	-	-	-			-	-	-	-	-			571	-	1250	-	0.67	
MEAN AGE		-							-							10.0					

Table 26. Biological data by length interval for burbot caught by experimental gill nets in Prelude Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
230	.	.	.	.	.	.	.	.	.	.	.	.	1	230	100	.	0.82	0
460	.	.	.	.	.	.	.	.	.	.	.	.	1	463	550	.	0.55	0
570	.	.	.	.	.	.	.	.	.	.	.	.	1	573	1350	.	0.72	0
650	.	.	.	.	.	.	.	.	.	.	.	.	1	653	2050	.	0.74	0
TOTAL	0						0						4					
MEAN		.	.	.	.			.	.	.	.			480	1013	863	0.71	

Table 27. Summary of harvest catch per unit effort (CPUE) for lake trout and northern pike from Prosperous Lake, 1973 and 1979.

Area	Year	Angler Interviews	Species	Harvest	CPUE	
					No. Caught /Angler Hour	No. Caught /Angler Day
Prosperous Lake	1973	33	Lake trout	2	0.03	0.06
			Northern Pike	22	0.28	0.67
	1979	34	Lake trout	5	0.04	0.15
			Northern Pike	34	0.08	0.29

Table 28. Biological data by length interval for lake trout caught by angling in Prosperous Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
475	1	499	1350	.	1.09	100	.	.	.	.	.	.	1	499	1350	.	1.09	100
500	1	510	1675	.	1.26	100	1	502	1325	.	1.05	100	2	506	1500	247	1.16	100
525	.	.	.	.	.	.	1	545	2050	.	1.27	100	1	545	2050	.	1.27	100
550	.	.	.	.	.	.	2	561	1563	972	0.88	100	2	561	1563	972	0.88	100
575	1	596	2450	.	1.16	100	.	.	.	.	.	.	1	596	2450	.	1.16	100
600	.	.	.	.	.	.	1	615	2425	.	1.04	100	1	615	2425	.	1.04	100
TOTAL	3						5						8					
MEAN		535	1825	565	1.17			557	1785	659	1.02			549	1800	583	1.08	

Table 29. Biological data by age group for lake trout caught by angling in Prosperous Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
13	1	510	-	1675	-	1.26	100	-	-	-	-	-	-	-	1	510	-	1675	-	1.26	100
14	1	499	-	1350	-	1.09	100	-	-	-	-	-	-	-	1	499	-	1350	-	1.09	100
15	-	-	-	-	-	-	-	2	524	30	1688	513	1.16	100	2	524	30	1688	513	1.16	100
16	-	-	-	-	-	-	-	2	561	1	1563	972	0.88	100	2	561	1	1563	972	0.88	100
19	-	-	-	-	-	-	-	1	615	-	2425	-	1.04	100	1	615	-	2425	-	1.04	100
TOTAL	2							5							7						
MEAN		505	8	1513	230	1.17			557	41	1785	659	1.02			542	42	1707	562	1.07	
MEAN AGE	13.5							16.2							15.4						

Table 30. Biological data by length interval for lake trout caught by angling in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
475	1	484	1175	.	1.04	100	.	.	.	.	.	.	1	484	1175	.	1.04	100
500	1	523	1450	.	1.01	100	.	.	.	.	.	.	1	523	1450	.	1.01	100
TOTAL	2						0						2					
MEAN		504	1313	194	1.02			.	.	.	.			504	1313	194	1.02	

Table 31. Biological data by age group for lake trout caught by angling in Prosperous Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
13	1	484	-	1175	-	1.04	100	-	-	-	-	-	-	-	1	484	-	1175	-	1.04	100
15	1	523	-	1450	-	1.01	100	-	-	-	-	-	-	-	1	523	-	1450	-	1.01	100
TOTAL	2							0							2						
MEAN		504	28	1313	194	1.02			-	-	-	-	-			504	28	1313	194	1.02	
MEAN AGE	14.0								-						14.0						

Table 32. Biological data by length interval for northern pike caught by angling in Prosperous Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
300	.	.	.	.	.	.	1	311	200	.	0.66	0	1	311	200	.	0.66	0
360	1	374	325	.	0.62	0	.	.	.	.	.	.	1	374	325	.	0.62	0
400	.	.	.	.	.	.	.	.	.	.	.	.	1	410	440	.	0.64	0
420	1	422	500	.	0.67	0	2	426	560	57	0.73	0	3	424	540	53	0.71	0
440	3	446	625	66	0.70	0	.	.	.	.	.	.	3	446	625	66	0.70	0
480	1	480	750	.	0.68	0	.	.	.	.	.	.	1	480	750	.	0.68	0
500	1	513	900	.	0.67	0	.	.	.	.	.	.	1	513	900	.	0.67	0
520	1	520	1060	.	0.75	0	1	534	975	.	0.64	0	2	527	1018	58	0.70	0
540	1	556	1400	.	0.81	0	.	.	.	.	.	.	1	556	1400	.	0.81	0
560	1	573	1250	.	0.66	0	.	.	.	.	.	.	1	573	1250	.	0.66	0
620	1	630	1850	.	0.74	0	.	.	.	.	.	.	1	630	1850	.	0.74	0
660	1	668	1800	.	0.60	0	.	.	.	.	.	.	1	668	1800	.	0.60	0
720	1	729	3125	.	0.81	0	.	.	.	.	.	.	1	729	3125	.	0.81	0
760	.	.	.	.	.	.	1	775	3550	.	0.76	0	1	775	3550	.	0.76	0
TOTAL	13						5						19					
MEAN		523	1141	767	0.70			494	1169	1359	0.70			510	1112	911	0.70	

Table 33. Biological data by age group for northern pike caught by angling in Prosperous Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	1	374	-	325	-	0.62	-	-	-	-	-	-	-	-	1	374	-	325	-	0.62	-
4	2	461	28	675	106	0.69	-	3	387	66	440	212	0.71	-	6	416	57	518	187	0.69	-
5	2	477	52	738	230	0.67	-	-	-	-	-	-	-	-	2	477	52	738	230	0.67	-
6	3	478	70	867	473	0.74	-	-	-	-	-	-	-	-	3	478	70	867	473	0.74	-
8	-	-	-	-	-	-	-	1	775	-	3550	-	0.76	-	1	775	-	3550	-	0.76	-
9	2	649	27	1825	35	0.67	-	1	534	-	975	-	0.64	-	3	611	69	1542	491	0.66	-
10	1	573	-	1250	-	0.66	-	-	-	-	-	-	-	-	1	573	-	1250	-	0.66	-
11	1	729	-	3125	-	0.81	-	-	-	-	-	-	-	-	1	729	-	3125	-	0.81	-
TOTAL	12							5							18						
MEAN		524	109	1148	800	0.70			494	176	1169	1359	0.70			509	126	1114	937	0.70	
MEAN AGE	6.5							5.8							6.2						

Table 34. Biological data by length interval for northern pike caught by angling in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
540	1	541	1100	.	0.69	100	.	.	.	.	.	.	2	542	1150	71	0.72	50
640	.	.	.	.	.	.	.	.	.	.	.	.	1	652	1750	.	0.63	0
660	.	.	.	.	.	.	.	.	.	.	.	.	2	666	1938	159	0.66	0
TOTAL	1						0						5					
MEAN		541	1100	.	0.69			.	.	.	.			613	1585	414	0.68	

Table 35. Biological data by length interval for arctic grayling caught by angling in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
300	1	305	300	.	1.06	100	.	.	.	.	.	.	1	305	300	.	1.06	100
TOTAL	1						0						1					
MEAN		305	300	.	1.06			.	.	.	.			305	300	.	1.06	

Table 36. Biological data by age group for arctic grayling caught by angling in Prosperous Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	1	305	-	300	-	1.06	100	-	-	-	-	-	-	-	1	305	-	300	-	1.06	100
TOTAL	1							0							1						
MEAN		305	-	300	-	1.06			-	-	-	-	-			305	-	300	-	1.06	
MEAN AGE	3.0								-						3.0						

Table 37. Catch and catch per unit effort (CPUE) for fish caught by experimental gill nets in Prosperous Lake, 1979.

Fish Species		Mesh Size (mm) 38	64	89	114	139	Total	CPUE[1]
Lake trout	N	27	21	9	18	15	90	1.77
	%	30.0	23.3	10.0	20.0	16.7	7.7	
Lake whitefish	N	432	204	91	69	10	806	15.87
	%	53.6	25.3	11.3	8.6	1.2	69.1	
Northern pike	N	18	14	11	2	-	45	0.89
	%	40.0	31.1	24.4	4.4		3.9	
Lake cisco	N	174	-	-	-	-	174	3.43
	%	100.0					14.9	
Round whitefish	N	19	-	1	-	-	20	0.39
	%	95.0		5.0			1.7	
Longnose sucker	N	10	1	2	5	-	18	0.35
	%	55.6	5.6	11.1	27.8		1.5	
Burbot	N	2	1	-	4	6	13	0.26
	%	15.4	7.7		30.8	46.1	1.1	
		682	241	114	98	31	1166	22.96
		58.5	20.7	9.8	8.4	2.7		

[1] No. fish/100 m of gill net/24 h.

Table 38. Biological data by length interval for lake trout caught by experimental gill nets in Prosperous Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
275	1	285	250	.	1.08	0	.	.	.	.	.	.	1	285	250	.	1.08	0
325	1	347	420	.	1.01	0	1	332	310	.	0.85	0	2	340	365	78	0.93	0
350	.	.	.	.	.	.	3	356	525	74	1.17	0	3	356	525	74	1.17	0
375	1	377	500	.	0.93	0	.	.	.	.	.	.	1	377	500	.	0.93	0
400	1	410	825	.	1.20	0	1	412	750	.	1.07	100	2	411	788	53	1.13	50
500	1	523	1695	.	1.18	100	1	504	1725	.	1.35	100	2	514	1710	21	1.27	100
525	1	534	1750	.	1.15	100	.	.	.	.	.	.	1	534	1750	.	1.15	100
550	1	561	2200	.	1.25	100	1	571	2500	.	1.34	100	2	566	2350	212	1.29	100
575	.	.	.	.	.	.	2	589	2450	283	1.20	100	2	589	2450	283	1.20	100
600	2	609	2410	438	1.06	100	2	618	2820	28	1.20	100	4	614	2615	347	1.13	100
625	3	635	2963	423	1.15	100	4	637	2766	485	1.07	100	7	636	2851	434	1.10	100
650	2	660	3400	566	1.18	100	1	657	3125	.	1.10	100	3	659	3308	430	1.16	100
700	2	706	4380	467	1.25	100	.	.	.	.	.	.	2	706	4380	467	1.25	100
775	1	788	3800	.	0.78	100	.	.	.	.	.	.	1	788	3800	.	0.78	100
800	2	810	7150	212	1.35	100	.	.	.	.	.	.	2	810	7150	212	1.35	100
TOTAL	19						16						35					
MEAN		595	2895	1971	1.14			531	1974	1078	1.14			566	2474	1669	1.14	

Table 39. Biological data by age group for lake trout caught by experimental gill nets in Prosperous Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
8	1	285	-	250	-	1.08	0	-	-	-	-	-	-	-	1	285	-	250	-	1.08	0
10	1	377	-	500	-	0.93	0	1	332	-	310	-	0.85	0	2	355	32	405	134	0.89	0
11	2	379	45	623	286	1.10	0	2	358	3	483	11	1.05	0	4	368	28	553	184	1.08	0
12	-	-	-	-	-	-	-	2	382	43	680	99	1.24	50	2	382	43	680	99	1.24	50
14	-	-	-	-	-	-	-	1	504	-	1725	-	1.35	100	1	504	-	1725	-	1.35	100
16	-	-	-	-	-	-	-	1	571	-	2500	-	1.34	100	1	571	-	2500	-	1.34	100
17	-	-	-	-	-	-	-	1	613	-	2800	-	1.22	100	1	613	-	2800	-	1.22	100
18	2	542	27	1948	357	1.22	100	-	-	-	-	-	-	-	2	542	27	1948	357	1.22	100
19	-	-	-	-	-	-	-	1	640	-	2975	-	1.13	100	1	640	-	2975	-	1.13	100
20	1	644	-	3450	-	1.29	100	-	-	-	-	-	-	-	1	644	-	3450	-	1.29	100
21	1	657	-	3000	-	1.06	100	1	589	-	2650	-	1.30	100	2	623	48	2825	247	1.18	100
23	1	616	-	2720	-	1.16	100	-	-	-	-	-	-	-	1	616	-	2720	-	1.16	100
26	1	602	-	2100	-	0.96	100	1	657	-	3125	-	1.10	100	2	630	39	2613	725	1.03	100
28	1	803	-	7300	-	1.41	100	-	-	-	-	-	-	-	1	803	-	7300	-	1.41	100
31	-	-	-	-	-	-	-	1	623	-	2840	-	1.17	100	1	623	-	2840	-	1.17	100
33	1	701	-	4050	-	1.18	100	-	-	-	-	-	-	-	1	701	-	4050	-	1.18	100
34	1	662	-	3800	-	1.31	100	-	-	-	-	-	-	-	1	662	-	3800	-	1.31	100
35	1	788	-	3800	-	0.78	100	-	-	-	-	-	-	-	1	788	-	3800	-	0.78	100
36	1	816	-	7000	-	1.29	100	-	-	-	-	-	-	-	1	816	-	7000	-	1.29	100
TOTAL	15							12							27						
MEAN		586	168	2874	2159	1.14			501	129	1771	1154	1.17			548	155	2384	1840	1.15	
MEAN AGE	22.1							16.7							19.7						

Table 40. Biological data by length interval for lake trout caught by experimental gills in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
175	.	.	.	.	.	.	1	198	60	.	0.77	0	2	189	55	7	0.82	0
200	.	.	.	.	.	.	1	205	100	.	1.16	0	1	205	100	.	1.16	0
275	1	280	100	.	0.46	0	.	.	.	.	.	.	1	280	100	.	0.46	0
375	.	.	.	.	.	.	.	.	.	.	.	.	1	389	.	.	.	0
400	.	.	.	.	.	.	.	.	.	.	.	.	1	420	.	.	.	0
425	.	.	.	.	.	.	.	.	.	.	.	.	2	433	.	.	.	0
450	.	.	.	.	.	.	1	472	1300	.	1.24	100	2	467	1300	.	1.24	50
475	.	.	.	.	.	.	.	.	.	.	.	.	2	487	.	.	.	0
500	1	519	1650	.	1.18	100	.	.	.	.	.	.	2	511	1650	.	1.18	50
525	5	533	1905	381	1.26	80	3	547	2017	126	1.23	100	12	537	1947	301	1.25	58
550	3	562	1992	326	1.12	67	2	561	1975	177	1.12	100	13	561	1985	247	1.12	31
575	4	592	2116	471	1.02	100	2	596	2400	212	1.13	100	13	589	2288	422	1.11	46
600	1	615	2900	.	1.25	100	2	614	2730	184	1.18	100	9	611	2787	163	1.20	33
625	2	644	3350	495	1.25	100	2	635	3100	71	1.21	100	7	634	3225	323	1.23	57
650	.	.	.	.	.	.	1	663	3200	.	1.10	100	2	668	3200	.	1.10	50
675	.	.	.	.	.	.	1	692	4150	.	1.25	100	5	684	4150	.	1.25	20
700	.	.	.	.	.	.	1	716	5500	.	1.50	100	4	716	5500	.	1.50	25
725	.	.	.	.	.	.	.	.	.	.	.	.	1	730	.	.	.	0
750	1	752	5950	.	1.40	100	.	.	.	.	.	.	4	760	5950	.	1.40	25
775	.	.	.	.	.	.	1	782	6325	.	1.32	100	2	779	6325	.	1.32	50
800	.	.	.	.	.	.	.	.	.	.	.	.	1	820	.	.	.	0
850	.	.	.	.	.	.	.	.	.	.	.	.	1	850	.	.	.	0
975	.	.	.	.	.	.	.	.	.	.	.	.	2	989	.	.	.	0
TOTAL	18						18						90[a]					
MEAN		565	2293	1190	1.14			565	2616	1572	1.19			593	2399	1402	1.16	

a) Includes tagged fish

Table 41. Biological data by age group for lake trout caught by experimental gill nets in Prosperous Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	180	-	50	-	0.86	0
7	-	-	-	-	-	-	-	1	198	-	60	-	0.77	0	1	198	-	60	-	0.77	0
8	-	-	-	-	-	-	-	1	205	-	100	-	1.16	0	1	205	-	100	-	1.16	0
9	1	280	-	100	-	0.46	0	-	-	-	-	-	-	-	1	280	-	100	-	0.46	0
14	3	527	8	1683	29	1.15	100	2	508	51	1600	424	1.21	100	5	520	28	1650	218	1.17	100
15	1	550	-	1650	-	0.99	0	1	548	-	2000	-	1.22	100	2	549	1	1825	247	1.10	50
16	2	559	40	2338	301	1.38	50	2	552	5	2000	212	1.19	100	4	555	23	2169	288	1.29	75
17	2	562	49	1538	124	0.90	100	2	591	35	2480	537	1.19	100	4	576	38	2009	630	1.05	100
18	1	594	-	2390	-	1.14	100	1	594	-	2550	-	1.22	100	2	594	0	2470	113	1.18	100
19	1	592	-	2500	-	1.20	100	-	-	-	-	-	-	-	2	584	12	2625	177	1.33	100
20	1	615	-	2900	-	1.25	100	2	605	10	2425	247	1.09	100	3	608	9	2583	325	1.14	100
22	-	-	-	-	-	-	-	1	663	-	3200	-	1.10	100	1	663	-	3200	-	1.10	100
23	-	-	-	-	-	-	-	1	640	-	3150	-	1.20	100	1	640	-	3150	-	1.20	100
24	-	-	-	-	-	-	-	1	716	-	5500	-	1.50	100	1	716	-	5500	-	1.50	100
25	1	752	-	5950	-	1.40	100	-	-	-	-	-	-	-	1	752	-	5950	-	1.40	100
26	1	565	-	2300	-	1.28	100	-	-	-	-	-	-	-	1	565	-	2300	-	1.28	100
29	2	610	54	2863	1184	1.22	100	-	-	-	-	-	-	-	2	610	54	2863	1184	1.22	100
30	-	-	-	-	-	-	-	1	692	-	4150	-	1.25	100	1	692	-	4150	-	1.25	100
31	1	640	-	3000	-	1.14	100	-	-	-	-	-	-	-	1	640	-	3000	-	1.14	100
32	-	-	-	-	-	-	-	1	630	-	3050	-	1.22	100	1	630	-	3050	-	1.22	100
34	-	-	-	-	-	-	-	1	782	-	6325	-	1.32	100	1	782	-	6325	-	1.32	100
TOTAL	17							18							37						
MEAN		567	94	2313	1223	1.13			565	151	2616	1572	1.19			556	137	2411	1420	1.16	
MEAN AGE	19.4							19.3							18.9						

Table 42. Biological data by length interval for lake whitefish caught by experimental gill nets in Prosperous Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
240	2	243	188	18	1.31	0	.	.	.	.	.	.	4	244	194	12	1.34	0
250	.	.	.	.	.	.	3	254	208	14	1.27	0	3	254	208	14	1.27	0
270	1	274	250	.	1.22	0	2	277	263	18	1.23	0	3	276	258	14	1.23	0
280	2	286	250	0	1.07	0	2	285	300	0	1.30	0	6	285	273	26	1.18	0
290	1	299	300	.	1.12	0	2	293	313	53	1.24	0	3	295	308	38	1.20	0
300	.	.	.	.	.	.	4	305	350	0	1.23	0	7	305	353	13	1.24	0
310	1	315	350	.	1.12	0	3	312	408	38	1.34	0	5	314	395	37	1.28	0
320	2	324	413	53	1.21	0	2	326	400	0	1.16	0	4	325	406	31	1.19	0
330	3	333	450	50	1.23	0	.	.	.	.	.	.	3	333	450	50	1.23	0
340	2	345	550	71	1.34	0	.	.	.	.	.	.	3	345	575	66	1.40	0
350	5	356	550	53	1.22	0	3	355	583	58	1.30	0	8	355	563	53	1.25	0
360	4	367	738	43	1.50	0	1	367	675	.	1.37	0	5	367	725	47	1.47	0
370	8	374	725	53	1.39	0	12	374	726	57	1.39	0	20	374	726	54	1.39	0
380	9	384	784	48	1.38	0	11	384	820	78	1.45	0	20	384	804	67	1.42	0
390	15	393	865	74	1.43	0	7	394	864	45	1.41	0	22	393	865	65	1.42	0
400	16	405	976	73	1.47	0	18	405	967	83	1.46	0	35	405	971	77	1.47	0
410	12	414	1008	92	1.42	0	17	415	1072	130	1.50	0	31	414	1041	116	1.46	0
420	10	424	1078	90	1.42	0	13	424	1110	94	1.46	0	23	424	1096	86	1.44	0
430	4	435	1256	156	1.53	0	13	434	1170	99	1.43	0	17	434	1190	116	1.45	0
440	10	444	1238	123	1.41	0	9	443	1269	94	1.46	0	19	444	1253	109	1.44	0
450	3	453	1208	300	1.30	0	3	453	1325	195	1.42	0	6	453	1267	235	1.36	0
460	1	465	1475	.	1.47	0	5	464	1513	144	1.52	0	6	464	1507	130	1.51	0
TOTAL MEAN	111	392	879	285	1.39		130	395	925	324	1.42		253	390	884	318	1.40	

Table 43. Biological data by age group for lake whitefish caught by experimental gill nets in Prosperous Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	245	-	200	-	1.36	-
5	3	307	29	358	101	1.21	-	1	253	-	225	-	1.39	-	4	294	36	325	106	1.26	-
6	7	383	14	761	119	1.35	-	5	324	51	500	262	1.34	-	12	358	44	652	225	1.35	-
7	10	351	62	665	295	1.41	-	8	372	49	774	262	1.42	-	22	350	61	663	309	1.39	-
8	11	379	21	775	178	1.40	-	19	391	43	889	286	1.42	-	31	387	36	851	251	1.41	-
9	14	389	30	838	258	1.38	-	21	376	53	799	326	1.40	-	36	379	46	801	303	1.39	-
10	12	385	52	850	350	1.38	-	13	384	49	883	352	1.46	-	28	377	52	815	360	1.41	-
11	16	419	22	1048	211	1.41	-	11	420	31	1121	311	1.47	-	27	420	26	1078	254	1.44	-
12	6	410	17	996	121	1.45	-	8	384	56	775	338	1.29	-	15	392	45	853	280	1.37	-
13	5	387	40	844	322	1.39	-	7	432	37	1138	314	1.39	-	13	413	41	1010	324	1.39	-
14	4	414	18	993	101	1.40	-	7	411	24	946	170	1.35	-	11	412	21	963	145	1.37	-
15	3	425	24	1108	118	1.46	-	5	420	18	1075	138	1.45	-	8	422	19	1088	123	1.45	-
16	7	416	22	1027	145	1.43	-	8	418	19	1056	156	1.44	-	15	417	20	1043	147	1.44	-
17	2	396	13	883	60	1.43	-	2	416	12	1075	71	1.50	-	4	406	16	979	123	1.46	-
18	-	-	-	-	-	-	-	4	427	25	1175	202	1.50	-	4	427	25	1175	202	1.50	-
19	1	444	-	1300	-	1.49	-	1	420	-	1100	-	1.48	-	2	432	17	1200	141	1.48	-
TOTAL	101							120							233						
MEAN		391	41	872	272	1.40			393	49	908	320	1.41			389	49	871	311	1.40	
MEAN AGE		10.3							10.8							10.5					

Table 44. Biological data by length interval for lake whitefish caught by experimental gill nets in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
150	.	.	.	.	.	.	.	.	.	.	.	.	12	156	53	16	1.39	0
160	.	.	.	.	.	.	.	.	.	.	.	.	11	164	49	2	1.10	0
170	.	.	.	.	.	.	.	.	.	.	.	.	11	175	66	23	1.23	0
180	1	189	90	.	1.33	0	2	184	83	11	1.33	0	24	184	82	30	1.30	0
190	.	.	.	.	.	.	1	195	90	.	1.21	0	27	194	80	23	1.08	0
200	.	.	.	.	.	.	2	203	95	7	1.14	0	13	203	98	5	1.17	0
210	.	.	.	.	.	.	.	.	.	.	.	.	8	215	100	0	1.01	0
220	1	225	150	.	1.32	0	1	228	120	.	1.01	0	6	224	123	25	1.08	0
230	2	233	150	0	1.19	0	1	239	100	.	0.73	0	6	235	133	29	1.04	0
240	3	244	167	29	1.15	0	.	.	.	.	.	.	6	245	167	29	1.15	0
250	3	253	193	12	1.19	0	.	.	.	.	.	.	6	254	193	12	1.19	0
260	1	263	200	.	1.10	0	1	262	200	.	1.11	0	4	265	200	0	1.11	0
270	1	278	250	.	1.16	0	.	.	.	.	.	.	3	274	250	.	1.16	0
280	1	289	300	.	1.24	0	1	288	240	.	1.00	100	4	288	270	42	1.12	25
290	3	296	283	29	1.10	0	2	298	320	42	1.21	50	8	295	284	37	1.10	13
300	2	300	313	18	1.16	0	3	304	310	17	1.10	0	9	304	311	15	1.12	0
310	2	312	375	35	1.24	0	1	310	350	.	1.17	0	7	313	367	29	1.22	0
320	2	328	450	0	1.28	0	2	325	400	0	1.17	0	9	325	425	29	1.22	0
330	3	336	483	29	1.28	0	4	334	445	33	1.20	0	11	334	461	35	1.23	0
340	5	345	530	45	1.29	20	5	344	513	46	1.26	20	26	344	522	44	1.27	8
350	5	355	570	45	1.28	20	6	355	583	61	1.30	0	23	355	577	52	1.29	4
360	2	360	550	0	1.18	0	10	363	627	72	1.31	20	42	364	607	73	1.27	5
370	17	375	689	67	1.31	41	11	374	665	55	1.27	64	57	374	679	63	1.29	25
380	25	385	776	82	1.36	48	13	384	783	55	1.38	62	74	384	778	74	1.37	26
390	12	393	827	71	1.37	50	17	394	866	76	1.42	71	54	393	850	75	1.40	33
400	14	404	889	66	1.34	86	13	404	888	96	1.35	77	58	404	884	78	1.34	36
410	10	415	970	71	1.35	40	5	414	930	45	1.31	80	42	414	957	65	1.34	19
420	13	424	1012	42	1.33	54	8	424	1009	112	1.33	100	43	425	1011	74	1.33	35
430	8	435	1026	91	1.25	75	8	435	1033	81	1.26	88	27	435	1035	83	1.26	48
440	6	446	1210	94	1.36	67	7	441	1150	119	1.34	100	21	443	1178	108	1.35	52
450	3	453	1167	104	1.26	100	.	.	.	.	.	.	11	454	1167	104	1.26	27
460	.	.	.	.	.	.	1	460	1300	.	1.34	100	3	465	1300	.	1.34	33
480	.	.	.	.	.	.	.	.	.	.	.	.	1	485	.	.	.	0
TOTAL	145						125						667					
MEAN		377	751	278	1.31			374	736	281	1.30			349	604	367	1.28	

Table 45. Biological data by age group for lake whitefish caught by experimental gill nets in Prosperous Lake, 1979.

AGE (YR)	MALES N	MALES LENGTH(MM) MEAN	MALES LENGTH(MM) SD	MALES WEIGHT(G) MEAN	MALES WEIGHT(G) SD	MALES K	MALES % MAT	FEMALES N	FEMALES LENGTH(MM) MEAN	FEMALES LENGTH(MM) SD	FEMALES WEIGHT(G) MEAN	FEMALES WEIGHT(G) SD	FEMALES K	FEMALES % MAT	COMBINED N	COMBINED LENGTH(MM) MEAN	COMBINED LENGTH(MM) SD	COMBINED WEIGHT(G) MEAN	COMBINED WEIGHT(G) SD	COMBINED K	COMBINED % MAT
3	1	189	-	90	-	1.33	0	6	199	17	94	15	1.20	0	22	189	16	85	23	1.25	0
4	2	249	20	175	35	1.13	0	1	239	-	100	-	0.73	0	8	212	33	106	50	1.06	0
5	5	252	17	186	42	1.16	0	3	326	26	417	126	1.17	0	12	251	55	207	149	1.11	0
6	15	302	41	362	167	1.24	0	12	328	40	463	214	1.22	25	30	306	47	381	199	1.21	10
7	4	339	63	525	266	1.25	25	9	361	19	611	114	1.29	11	14	350	39	561	184	1.25	14
8	19	381	21	718	154	1.28	37	7	362	35	621	183	1.27	71	27	375	26	686	165	1.27	46
9	12	373	31	713	191	1.34	33	10	371	26	709	228	1.34	40	21	371	28	698	198	1.33	33
10	15	386	29	757	185	1.30	40	18	383	23	760	152	1.34	72	32	384	26	757	167	1.32	56
11	12	396	23	858	153	1.38	67	11	390	25	770	150	1.29	45	23	393	23	816	155	1.33	57
12	10	395	16	830	95	1.34	40	10	408	20	947	175	1.38	70	20	402	19	889	149	1.36	55
13	5	398	16	878	137	1.38	20	9	402	18	889	86	1.38	78	14	400	17	885	102	1.38	57
14	9	424	22	996	148	1.30	78	2	422	2	1025	35	1.37	100	11	424	20	1001	134	1.31	82
15	13	420	18	1002	139	1.35	77	10	427	15	1013	88	1.31	100	23	423	17	1007	117	1.33	87
16	6	424	20	1035	134	1.35	67	6	427	27	1075	192	1.38	67	11	425	23	1065	163	1.38	73
17	2	427	11	1025	35	1.32	100	-	-	-	-	-	-	-	2	427	11	1025	35	1.32	100
18	1	448	-	1250	-	1.39	100	-	-	-	-	-	-	-	1	448	-	1250	-	1.39	100
19	1	452	-	1050	-	1.14	100	-	-	-	-	-	-	-	1	452	-	1050	-	1.14	100
TOTAL	132							114							272						
MEAN		376	56	742	285	1.30			372	57	725	284	1.30			355	76	666	333	1.29	
MEAN AGE		10.4							9.9							9.5					

Table 46. Biological data by length interval for northern pike caught by experimental gill nets in Prosperous Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
420	.	.	.	.	.	.	1	429	625	.	0.79	0	1	429	625	.	0.79	0
480	.	.	.	.	.	.	2	493	850	0	0.71	0	2	493	850	0	0.71	0
540	1	558	1250	.	0.72	0	.	.	.	.	.	.	1	558	1250	.	0.72	0
580	3	594	950	444	0.45	0	1	582	1200	.	0.61	0	4	591	1013	384	0.49	0
600	1	619	2050	.	0.86	0	1	607	1400	.	0.63	0	2	613	1725	460	0.75	0
620	3	632	1467	548	0.57	0	.	.	.	.	.	.	3	632	1467	548	0.57	0
640	.	.	.	.	.	.	1	642	1975	.	0.75	0	1	642	1975	.	0.75	0
680	1	690	2300	.	0.70	0	1	690	2750	.	0.84	0	2	690	2525	318	0.77	0
700	1	704	2645	.	0.76	0	.	.	.	.	.	.	1	704	2645	.	0.76	0
840	1	847	6375	.	1.05	0	.	.	.	.	.	.	1	847	6375	.	1.05	0
TOTAL	11						7						18					
MEAN		645	1988	1593	0.65			562	1379	752	0.72			613	1751	1336	0.68	

Table 47. Biological data by age group for northern pike caught by experimental gill nets in Prosperous Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	-	-	-	-	-	-	-	1	429	-	625	-	0.79	-	1	429	-	625	-	0.79	-
4	-	-	-	-	-	-	-	1	498	-	850	-	0.69	-	1	498	-	850	-	0.69	-
5	-	-	-	-	-	-	-	1	582	-	1200	-	0.61	-	1	582	-	1200	-	0.61	-
6	1	558	-	1250	-	0.72	-	1	690	-	2750	-	0.84	-	2	624	93	2000	1061	0.78	-
7	4	639	47	1649	746	0.61	-	1	488	-	850	-	0.73	-	5	609	79	1489	738	0.63	-
8	1	589	-	800	-	0.39	-	-	-	-	-	-	-	-	1	589	-	800	-	0.39	-
9	3	636	48	1650	918	0.62	-	-	-	-	-	-	-	-	3	636	48	1650	918	0.62	-
10	-	-	-	-	-	-	-	1	642	-	1975	-	0.75	-	1	642	-	1975	-	0.75	-
12	1	639	-	1900	-	0.73	-	-	-	-	-	-	-	-	1	639	-	1900	-	0.73	-
13	1	847	-	6375	-	1.05	-	-	-	-	-	-	-	-	1	847	-	6375	-	1.05	-
TOTAL	11							6							17						
MEAN		645	79	1988	1593	0.65			555	100	1375	824	0.73			613	95	1772	1374	0.68	
MEAN AGE		8.5							5.8							7.6					

Table 48. Biological data by length interval for northern pike caught by experimental gill nets in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
420	1	422	1000	.	1.33	100	.	.	.	.	.	.	1	422	1000	.	1.33	100
500	.	.	.	.	.	.	1	515	1150	.	0.84	100	1	515	1150	.	0.84	100
520	1	524	1100	.	0.76	100	.	.	.	.	.	.	3	528	1100	.	0.76	33
540	1	548	1150	.	0.70	100	.	.	.	.	.	.	1	548	1150	.	0.70	100
560	.	.	.	.	.	.	1	570	1250	.	0.67	100	2	565	1250	.	0.67	50
580	5	592	1470	104	0.71	100	2	591	1450	71	0.70	100	7	592	1464	90	0.71	100
600	5	610	1582	66	0.70	80	.	.	.	.	.	.	6	611	1582	66	0.70	67
620	1	629	1750	.	0.70	100	1	625	1675	.	0.69	100	3	627	1713	53	0.69	67
640	3	655	2325	152	0.83	100	1	650	1650	.	0.60	100	6	653	2156	360	0.77	67
680	1	690	2350	.	0.72	100	1	694	2000	.	0.60	100	2	692	2175	247	0.66	100
700	.	.	.	.	.	.	1	700	2300	.	0.67	100	2	700	2300	.	0.67	50
720	.	.	.	.	.	.	.	.	.	.	.	.	2	722	.	.	.	0
740	.	.	.	.	.	.	1	750	3550	.	0.84	100	1	750	3550	.	0.84	100
780	.	.	.	.	.	.	.	.	.	.	.	.	1	780	.	.	.	0
800	.	.	.	.	.	.	.	.	.	.	.	.	1	803	.	.	.	0
840	.	.	.	.	.	.	.	.	.	.	.	.	1	850	.	.	.	0
900	1	900	5750	.	0.79	100	1	911	5900	.	0.78	100	2	906	5825	106	0.78	100
TOTAL	19						10						42[a]					
MEAN		615	1860	1030	0.76			660	2238	1463	0.71			644	1990	1185	0.75	

a) Includes tagged fish

Table 49. Biological data by age group for northern pike caught by experimental gill nets in Prosperous Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
5	1	422	-	1000	-	1.33	100	-	-	-	-	-	-	-	1	422	-	1000	-	1.33	100
6	4	564	34	1338	259	0.74	100	2	554	55	1325	247	0.78	100	6	561	37	1333	229	0.75	100
7	2	609	2	1555	7	0.69	50	3	595	28	1442	216	0.68	100	5	600	21	1487	165	0.69	80
8	5	629	44	1810	460	0.72	100	-	-	-	-	-	-	-	5	629	44	1810	460	0.72	100
9	-	-	-	-	-	-	-	1	694	-	2000	-	0.60	100	1	694	-	2000	-	0.60	100
10	3	634	34	2058	544	0.79	100	2	700	71	2600	1344	0.72	100	5	660	56	2275	829	0.77	100
11	2	622	11	1700	71	0.71	100	1	700	-	2300	-	0.67	100	3	648	46	1900	350	0.70	100
14	1	900	-	5750	-	0.79	100	-	-	-	-	-	-	-	1	900	-	5750	-	0.79	100
15	-	-	-	-	-	-	-	1	911	-	5900	-	0.78	100	1	911	-	5900	-	0.78	100
TOTAL	18							10							28						
MEAN		616	92	1880	1056	0.77			660	112	2238	1463	0.71			632	100	2008	1203	0.75	
MEAN AGE		8.3							8.8							8.5					

Table 50. Biological data by length interval for round whitefish caught by experimental gill nets in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
200	.	.	.	.	.	.	.	.	.	.	.	.	1	200	.	.	.	0
210	1	214	125	.	1.28	0	.	.	.	.	.	.	4	212	125	.	1.28	0
230	.	.	.	.	.	.	.	.	.	.	.	.	1	230	.	.	.	0
260	.	.	.	.	.	.	.	.	.	.	.	.	1	262	.	.	.	0
320	.	.	.	.	.	.	.	.	.	.	.	.	2	324	.	.	.	0
350	.	.	.	.	.	.	.	.	.	.	.	.	1	359	.	.	.	0
400	.	.	.	.	.	.	1	404	750	.	1.14	100	1	404	750	.	1.14	100
TOTAL MEAN	1	214	125	.	1.28		1	404	750	.	1.14		11	268	438	442	1.21	

Table 51. Biological data by age group round whitefish caught by experimental gill nets in Prosperous Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
5	1	214	-	125	-	1.28	0	-	-	-	-	-	-	-	1	214	-	125	-	1.28	0
10	-	-	-	-	-	-	-	1	404	-	750	-	1.14	100	1	404	-	750	-	1.14	100
TOTAL	1							1							2						
MEAN		214	-	125	-	1.28			404	-	750	-	1.14			309	134	438	442	1.21	
MEAN AGE		5.0							10.0							7.5					

Table 52. Biological data by length interval for lake cisco caught by experimental gill nets in Prosperous Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
150	1	159	50	.	1.24	100	1	155	50	.	1.34	100	2	157	50	0	1.29	100
160	3	165	50	0	1.12	33	5	163	50	0	1.15	80	8	164	50	0	1.14	63
170	2	175	63	18	1.17	50	5	176	50	0	0.92	100	7	175	54	9	0.99	86
180	.	.	.	.	.	.	2	187	50	0	0.77	100	2	187	50	0	0.77	100
190	.	.	.	.	.	.	1	195	75	.	1.01	100	1	195	75	.	1.01	100
TOTAL	6						14						20					
MEAN		167	54	10	1.16			173	52	7	1.02			171	53	8	1.06	

Table 53. Biological data by age group lake cisco caught by experimental gill nets in Prosperous Lake, 1973.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	2	161	2	50	0	1.21	50	5	166	6	50	0	1.10	80	7	164	6	50	0	1.13	71
4	2	171	4	50	0	1.01	50	7	174	12	50	0	0.98	100	9	173	10	50	0	0.98	89
5	2	170	8	63	18	1.25	50	2	187	12	63	18	0.95	100	4	178	13	63	14	1.10	75
TOTAL	6							14							20						
MEAN		167	7	54	10	1.16			173	12	52	7	1.02			171	10	53	8	1.06	
MEAN AGE		4.0							3.8							3.9					

Table 54. Biological data by length interval for lake cisco caught by experimental gill nets in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
140	.	.	.	.	.	.	.	.	.	.	.	.	1	145	75	.	2.46	0
150	.	.	.	.	.	.	.	.	.	.	.	.	1	151	50	.	1.45	0
160	1	163	30	.	0.69	0	1	166	30	.	0.66	100	9	165	53	21	1.20	11
170	4	174	49	6	0.94	50	3	175	43	12	0.81	33	23	175	60	21	1.09	13
180	5	184	65	22	1.05	80	4	183	54	23	0.89	75	22	183	69	23	1.12	32
190	8	195	64	20	0.86	75	9	194	61	12	0.83	100	28	194	66	18	0.90	54
200	3	202	97	6	1.17	67	6	206	79	19	0.91	83	12	205	88	16	1.03	58
210	2	214	60	14	0.61	100	4	216	84	20	0.83	100	11	215	91	27	0.92	55
220	.	.	.	.	.	.	.	.	.	.	.	.	1	220	100	.	0.94	0
TOTAL	23						27						108					
MEAN		190	64	22	0.93			195	64	21	0.85			188	70	24	1.05	

Table 55. Biological data by age group lake cisco caught by experimental gill nets in Prosperous Lake, 1979.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	194	-	100	-	1.37	0
4	6	179	13	60	24	1.01	50	7	187	10	55	17	0.83	71	14	184	12	57	19	0.90	57
5	9	196	8	62	19	0.82	78	7	200	13	71	22	0.88	71	17	197	10	66	20	0.85	75
6	2	187	4	75	35	1.17	50	5	212	8	79	20	0.83	100	7	205	14	78	22	0.92	86
7	1	217	-	70	-	0.69	100	-	-	-	-	-	-	-	1	217	-	70	-	0.69	100
TOTAL	18							19							40						
MEAN		191	14	63	21	0.92			198	14	67	21	0.85			194	14	66	21	0.89	
MEAN AGE	4.9							4.9							4.8						

Table 56. Biological data by length interval for burbot caught by experimental gill nets in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
500	.	.	.	.	.	.	.	.	.	.	.	.	1	500	900	.	0.72	0
620	1	620	1575	.	0.66	100	1	625	1550	.	0.63	100	3	623	1592	52	0.66	67
630	1	638	1450	.	0.56	0	.	.	.	.	.	.	1	638	1450	.	0.56	0
670	.	.	.	.	.	.	1	670	2000	.	0.66	100	1	670	2000	.	0.66	100
680	.	.	.	.	.	.	.	.	.	.	.	.	1	681	2150	.	0.68	0
720	.	.	.	.	.	.	1	725	2350	.	0.62	100	1	725	2350	.	0.62	100
730	.	.	.	.	.	.	1	731	2300	.	0.59	100	1	731	2300	.	0.59	100
740	.	.	.	.	.	.	1	742	2750	.	0.67	100	1	742	2750	.	0.67	100
TOTAL	2						5						10					
MEAN		629	1513	88	0.61			699	2190	446	0.64			656	1868	542	0.65	

Table 57. Biological data by length interval for white sucker caught by experimental gill nets in Prosperous Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
450	.	.	.	.	.	.	1	459	1450	.	1.50	100	1	459	1450	.	1.50	100
480	1	487	850	.	0.74	100	.	.	.	.	.	.	1	487	850	.	0.74	100
520	.	.	.	.	.	.	1	525	2300	.	1.59	100	1	525	2300	.	1.59	100
TOTAL	1						2						3					
MEAN		487	850	.	0.74			492	1875	601	1.54			490	1533	729	1.27	

Table 58. Biological data by length interval for longnose sucker caught by experimental gill nets in Prosperous Lake, 1973.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
330	1	335	590	.	1.57	100	.	.	.	.	.	.	1	335	590	.	1.57	100
TOTAL	1						0						1					
MEAN		335	590	.	1.57			.	.	.	.			335	590	.	1.57	

Table 59. Biological data by length interval for longnose sucker caught by experimental gill nets in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
140	.	.	.	.	.	.	.	.	.	.	.	.	1	143	50	.	1.71	0
170	.	.	.	.	.	.	.	.	.	.	.	.	1	171	100	.	2.00	0
360	.	.	.	.	.	.	.	.	.	.	.	.	1	367	700	.	1.42	0
400	.	.	.	.	.	.	.	.	.	.	.	.	2	408	950	71	1.40	0
410	.	.	.	.	.	.	.	.	.	.	.	.	1	413	1150	.	1.63	0
420	1	423	1100	.	1.45	100	.	.	.	.	.	.	2	426	1150	71	1.49	50
440	.	.	.	.	.	.	.	.	.	.	.	.	3	445	1183	161	1.34	0
TOTAL	1						0						11					
MEAN		423	1100	.	1.45			.	.	.	.			372	886	435	1.51	

Table 60. Summary of weight-length relationships ($\log_{10}W = a + b\ (\log_{10}L)$) for each fish species (sexes combined) from Prelude and Prosperous lakes, 1973 and 1979.

Lake	Year	Species	N	Y-intercept (a)	Slope (b)	Standard Dev. of b (S_b)	95% CI of b
Prosperous	1973	Lake trout					
		Gillnetted	35	-5.2540	3.1125	0.0877	2.906-3.319
		Angled	8	-3.6212	2.5029	1.5974	-2.240-7.246
		Combined	43	-5.2331	3.1024	0.1124	2.641-3.364
		Lake whitefish					
		Gillnetted	253	-5.7758	3.3558	0.0423	3.261-3.451
		Northern pike					
		Gillnetted	18	-6.2177	3.3700	0.5326	2.053-4.687
		Angled	19	-5.5432	3.1433	0.0857	2.933-3.354
		Combined	37	-5.4128	3.0879	0.1817	2.662-3.513
		Lake cisco					
		Gillnetted	20	-0.4176	0.9560	0.4324	-0.101-2.013
	1979	Lake trout					
		Gillnetted	38	-5.9177	3.3571	0.0922	3.141-3.573
		Lake whitefish					
		Gillnetted	338	-5.3182	3.1675	0.0268	3.108-3.228
		Northern pike					
		Gillnetted	29	-4.311	2.7060	0.1811	2.276-3.136
		Angled	5	-3.7055	2.4745	0.2341	1.497-3.452
		Combined	34	-4.3051	2.7018	0.1665	2.310-3.094
		Lake cisco					
		Gillnetted	104	-2.3799	1.8466	0.3574	1.033-2.660
		Longnose sucker					
		Gillnetted	11	-4.1742	2.7438	0.0819	2.524-2.964
		Burbot					
		Gillnetted	10	-4.3603	2.7053	0.2092	2.130-3.281
Prelude	1973	Lake trout					
		Gillnetted	55	-5.5544	3.2254	0.0941	3.008-3.442
		Angled	22	-5.5417	3.2104	0.1839	2.765-3.656
		Combined	77	-5.5163	3.2082	0.0802	3.025-3.392
		Lake whitefish					
		Gillnetted	204	-5.4073	3.1992	0.0352	3.120-3.278
		Northern pike					
		Gillnetted	9	-2.1674	1.9232	0.6771	-0.003-3.847
		Angled	17	-4.2004	2.6444	0.1652	2.233-3.056
		Combined	26	-4.2579	2.6688	0.1368	2.342-2.996
	1979	Lake trout					
		Gillnetted	73	-5.2571	3.1197	0.0669	2.967-3.273
		Angled	8	-5.8851	3.3167	0.5886	1.569-5.064
		Combined	81	-5.2576	3.1162	0.0717	2.952-3.260
		Lake whitefish					
		Gillnetted	499	-5.4720	3.2270	0.0214	3.179-3.275
		Northern pike					
		Gillnetted	7	-4.4772	2.7408	0.3036	1.781-3.701
		Lake cisco					
		Gillnetted	57	0.8663	0.3827	0.3238	-0.363-1.127

Table 61. Biological data by length interval for tagged lake trout caught by angling in Prosperous Lake, 1979.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	ROUND WEIGHT(G) MEAN	ROUND WEIGHT(G) SD	K
425	2	10	434	.	.	.
475	1	5	498	.	.	.
500	3	14	520	.	.	.
525	2	10	539	.	.	.
550	2	10	566	.	.	.
575	1	5	598	.	.	.
600	4	19	609	.	.	.
625	2	10	630	.	.	.
650	3	14	668	.	.	.
700	1	5	705	.	.	.
TOTAL	21					
MEAN			578	.	.	.

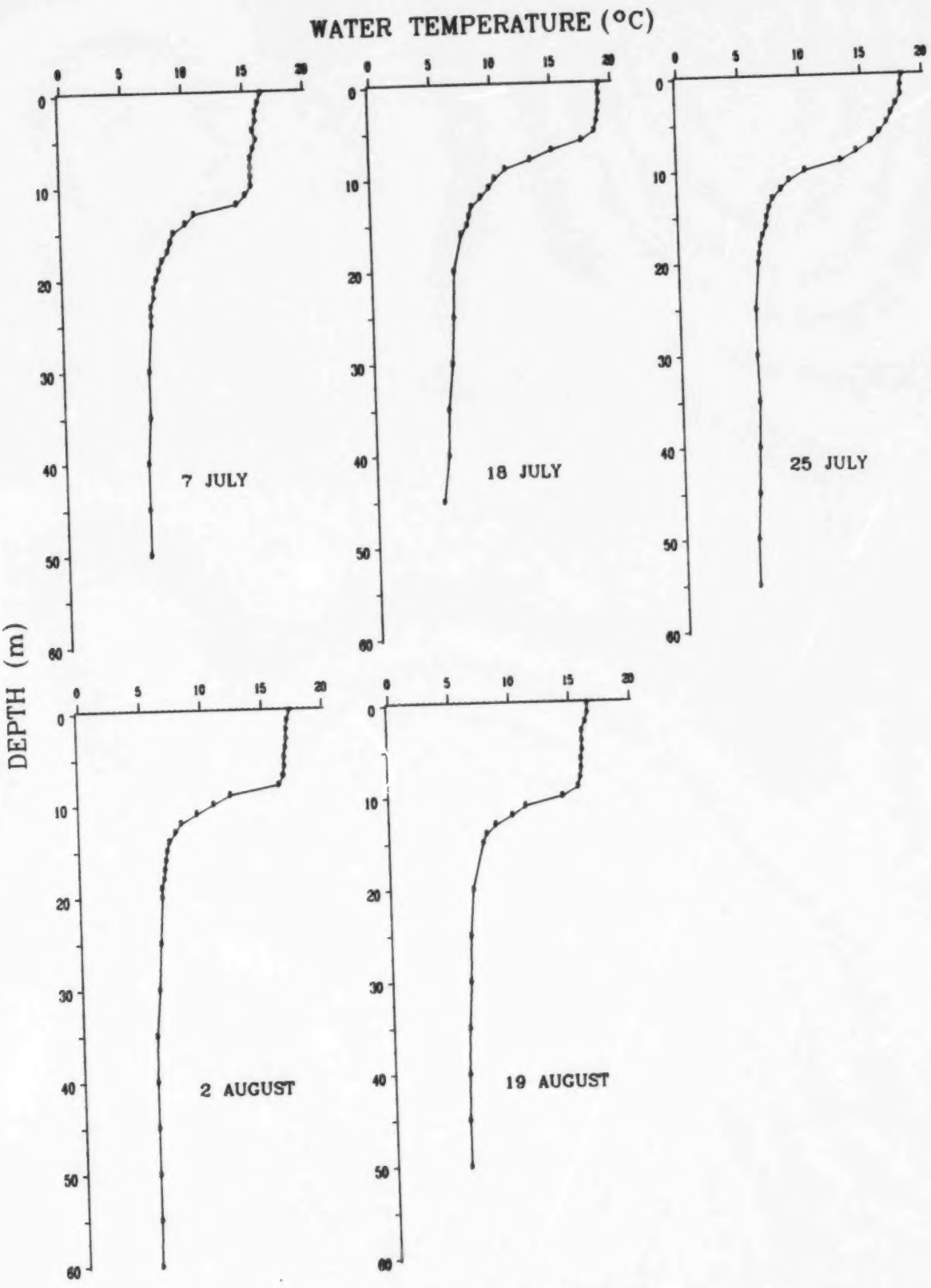
Table 62. Biological data by length interval for tagged lake trout caught by 38 mm gill nets at the Can Hydro Station on Prosperous Lake, September 1979.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	ROUND WEIGHT(G) MEAN	ROUND WEIGHT(G) SD	K
475	2	8	493	.	.	.
500	1	4	520	.	.	.
525	7	28	540	.	.	.
550	2	8	555	.	.	.
575	3	12	585	.	.	.
600	2	8	614	.	.	.
625	4	16	633	.	.	.
650	3	12	664	.	.	.
750	1	4	750	.	.	.
TOTAL	25					
MEAN			586	.	.	.

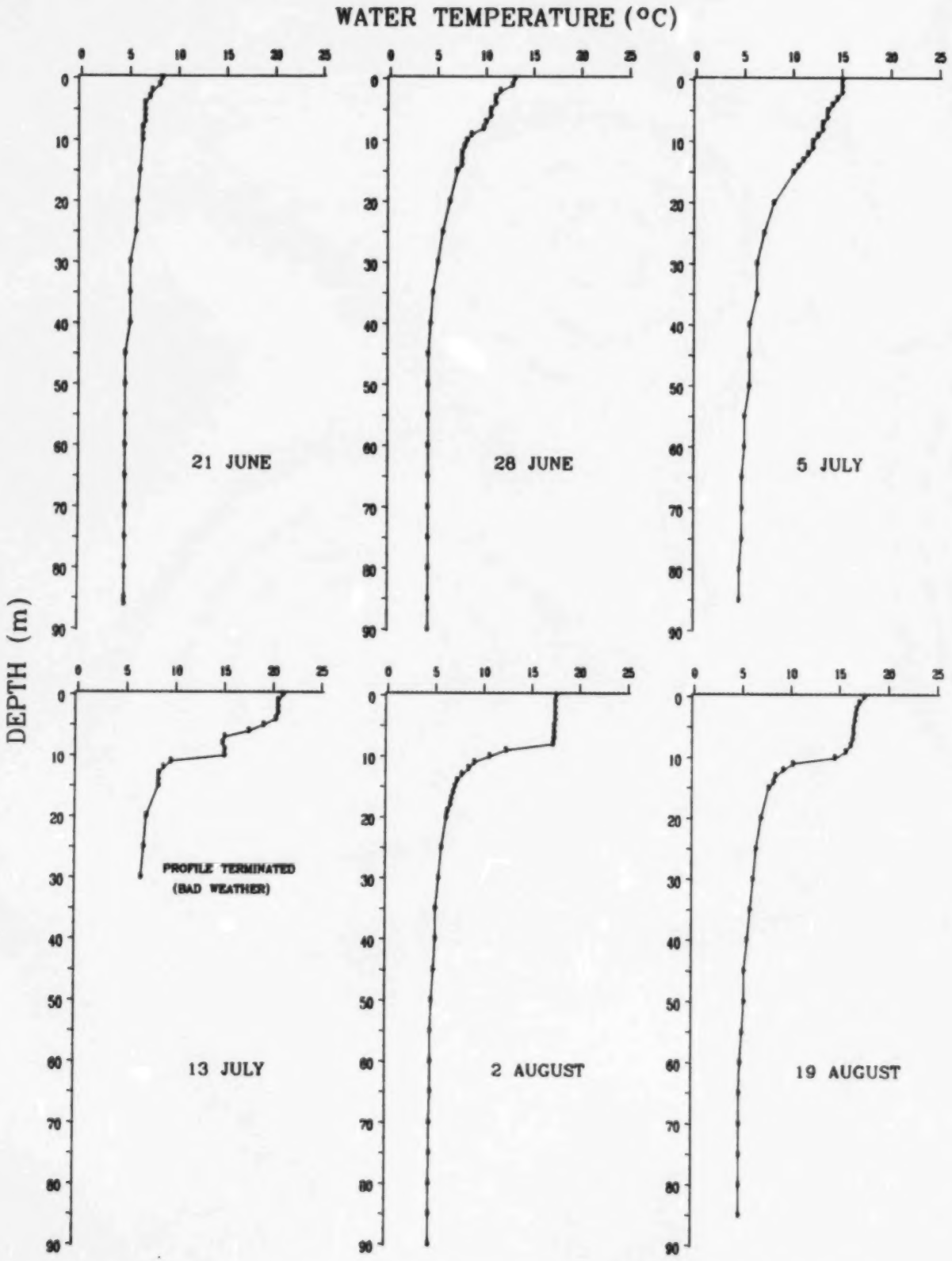
Appendix 1. Summary of information on sample dates, sample locations, set duration, depth, and catch per unit effort for Prelude and Prosperous Lakes, 1979.

Lake	Date dd/mm/yr	Location #	Set #	Net Length (m)	Set Duration (hrs)	Water Depth (m)	Temp. (°C)	Total Catch	CPUE[a]
Prelude Lake	160679	1	1	114.3[1]	7.5	10-40	4.2	1	2.8
	040779	2	2	228.6[1]	17.0	5-20	15.3	19	11.7
	040779	3	3	228.6[1]	17.5	10-30	15.8	10	6.0
	050779	4	4	238.6[1]	22.0	30-40	-	45	21.5
	050779	5	5	228.6[1]	20.0	5-10	-	11	5.8
	170779	6	6	114.3[1]	13.5	6-15	19.1	28	43.6
	170779	8	8	228.6[1]	14.0	30	18.7	46	34.5
	180779	10	10	114.3[1]	17.5	15-30	19.0	33	39.6
	180779	11	11	228.6[1]	17.0	30-50	18.4	35	21.6
	200779	13	13	114.3[1]	19.5	30-40	18.8	32	34.3
	200779	14	14	228.6[1]	20.5	15-20	19.5	71	36.4
	250779	17	17	114.3[1]	23.0	5-15	17.8	28	25.6
Prosperous Lake	140679	1	1	228.6[1]	18.0	15-30	4.2	24	14.0
	150679	2	2	114.3[1]	18.0	15-25	4.2	2	2.3
	150679	3	3	114.3[1]	18.0	25	4.2	3	3.5
	150679	4	4	228.6[1]	18.0	25	4.2	5	2.9
	150679	5	5	228.6[1]	18.0	10-30	3.6	-	-
	160679	6	6	228.6[1]	7.5	16-35	4.2	20	28.0
	170679	7	7	228.6[1]	7.5	5-15	8.9	21	29.4
	180679	8	8	114.3[1]	8.0	17-27	9.6	-	-
	180679	9	9	114.3[1]	11.0	8-15	12.5	1	1.9
	190679	10	10	228.6[1]	10.0	6-12	6.3	1	1.0
	200679	11	11	114.3[1]	18.0	12-15	8.5	-	-
	200679	12	12	91.4[2]	18.0	10-30	8.5	2	2.9
	200679	13	13	91.4[3]	19.0	10-30	10.2	32	44.2
	200679	14	14	114.3[1]	12.0	10-30	10.2	26	45.5
	200679	15	15	137.2[4]	12.0	10	5.3	11	16.0
	210679	16	16	114.3[1]	24.0	10	7.5	13	11.4
	210679	17	17	137.2[4]	24.0	10	6.8	13	9.5
	200679	18	18	91.4[3]	24.0	4- 6	8.2	12	13.1
	200679	19	19	91.4[2]	24.0	5-16	8.2	10	10.9
	210679	20	20	182.9[5]	2.4	2- 4	8.3	114	62.3
	220679	21	21	137.2[4]	20.0	4-10	-	11	9.6
Prosperous Lake continued	220679	22	22	91.4[3]	20.0	12-15	8.9	14	18.4
	220679	23	23	91.4[2]	20.0	8-12	8.9	25	32.8
	220679	24	24	182.9[5]	12.0	2- 4	8.3	26	28.4
	220679	25	25	114.3[1]	20.0	4-15	-	16	16.8
	260679	26	26	91.4[2]	18.0	3-12	-	9	13.1
	260679	27	27	91.4[3]	18.0	3-26	9.6	1	1.5
	260679	28	28	228.6[1]	15.0	2-18	13.0	28	19.6
	260679	29	29	91.4[2]	18.0	26-29	10.0	6	8.7
	260679	30	30	182.9[1]	15.0	22-36	10.2	23	20.1
	260679	31	31	137.2[6]	15.0	2-20	11.1	12	14.0
	270679	32	32	91.4[3]	11.0	2-20	12.5	27	64.4
	270679	33	33	91.4[2]	24.0	2-28	13.4	10	10.9
	270679	34	34	137.2[6]	24.5	4-15	-	28	20.0
	270679	35	35	228.6[1]	23.0	3-15	14.6	114	52.0
	270679	36	36	228.6[1]	24.5	2-22	10.8	48	20.6
	270679	37	37	137.2[2]	15.0	3-20	10.0	11	12.8
	280679	38	38	91.4[2]	20.0	9-25	9.9	11	14.4
	290679	39	39	91.4[2]	21.0	2- 3	10.6	25	31.2
	290679	40	40	91.4[2]	18.0	3- 6	11.7	27	39.4
	040779	41	41	137.2[6]	17.0	3-15	11.6	44	45.3
	040779	42	42	137.2[2]	19.0	3- 6	11.7	15	13.8
	040779	43	43	137.2[2]	19.0	2-15	13.4	28	25.8
	050779	44	44	91.4[2]	16.0	3-11	16.5	8	13.1
	050779	45	45	91.4[2]	17.0	12-13	16.8	29	44.8
	050779	46	46	91.4[3]	15.0	17-18	14.4	9	15.7
	050779	47	47	91.4[5]	16.0	30-35	14.5	8	13.1
	120779	48	48	91.4[2]	20.0	30	19.0	55	72.2
	120779	49	49	91.4[2]	20.0	6-10	21.0	75	98.4
	120779	50	50	137.2[5]	20.0	30	18.5	41	35.9
	150879	51	51	91.4[2]	17.5	4	18.0	25	37.5
	150879	52	52	45.7[2]	18.5	4	18.0	4	11.3
	150879	53	53	22.9[2]	18.0	4	18.0	12	70.0
	150879	54	54	45.7[2]	18.0	30	18.0	17	49.6
	160879	55	55	205.7[2]	17.0	-	18.0	17	11.7

[a] No. fish/100 m of gill net/24 h
[1] 38, 64, 89, 114, 139 mm mesh
[2] 38 mm mesh
[3] 64 mm mesh
[4] 38, 114, 139 mm mesh
[5] 38, 64 mm mesh
[6] 38, 64, 89 mm mesh



Appendix 2. Temperature profiles determined from Prelude Lake, 1979.



Appendix 3. Temperature profiles determined from Prosperous Lake, 1979.